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ABSTRACT

Proceedings of two national working conferences held to discuss career education for the hearing impaired are in this volume. Administrative, counselor, and teacher representatives from schools having experience in career education attended. The report covers issues they addressed following the keynote speeches, appearing in Section 1, given by specialists on obstacles to be overcome, the relevance of career education for the hearing impaired, directive counseling from a vocational rehabilitation perspective, and how career education can meet the needs of business and industry. Section 2--What Have We Learned?--begins with the list of areas for discussion followed by separate summaries of what the three groups of participants had to say. Section 3 concerns identification of the most important and urgent issues on which consensus was sought, with votes tabulated; inservice staff training was voted most important and urgent. "Where Do We Go From Here?"--Section 4--notes the beginning of the National Project on Career Education which hopes to put ideas into action and organize technical assistance to schools participating in regionally based, inservice training programs. Appendixes contain the five papers presented and lists of participants and of pre-conference recommended readings. (CP)

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CAREER DEVELOPMENT for the HEARING IMPAIRED:

Proceedings of Two National Working Conferences

Model Secondary School for the Deaf
Washington, D.C. 20002
February 24, 25, 1978

National Technical Institute for the Deaf
Rochester, N.Y. 14623
September 21, 22, 23, 1978

Editors

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NATIONAL INSTITUTE OF EDUCATION

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In addition to the planning committees, both internal and external to the Model Secondary School for the Deaf and the National Technical Institute for the Deaf, the editors wish to express their appreciation

to Dr. Victor H. Galloway, without whose insight, courage, and successful role modeling these conferences would have lost much of their meaning. Dr. Galloway's personal interest in and unyielding support of enhanced career development for deaf students had led us to pay this tribute.

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Editors' Preface

The report which follows represents as complete a record as possible of the proceedings of two national conferences on career development for the hearing impaired. We, the editors, believe that these proceedings add immeasurable knowledge to the field of career education for hearing impaired students in grades kindergarden - 12.

In recent years, the Model Secondary School for the Deaf (MSSD) and the National Technical Institute for the Deaf (NTID) have received numerous requests from residential schools for the deaf regarding the implementation of career education. In response to those requests, a meeting was held in 1977 with representatives from the Rochester School for the Deaf, Marie H. Katzenbach School for the Deaf, St. Mary's School for the Deaf, MSSD, and NTID.

From this meeting it was decided that the following major objectives needed to be addressed:

1. To define career education as related to hearing impaired individuals,
2. To create awareness of career education trends for hearing impaired individuals, and
3. To describe future priorities for the career education of hearing impaired individuals.

As an initial step in addressing these objectives, two national working conferences were planned. Invited to the first conference were residential schools with experience in career education and schools within MSSD's primary service area (Maryland, Pennsylvania, West Virginia,

Virginia, Delaware, District of Columbia). A second working conference was planned specifically for day and mainstreaming programs. The purpose of keeping day and residential programs separate was to determine if their respective needs and priorities differ.

Each school participating in the first conference was asked to send three representatives: an administrator, a teacher, and a counselor or residence program person. For the second conference four representatives were asked to attend, the additional person to represent elementary level classroom teaching. Each of the representatives attending the conferences was selected because they were in a position to affect the implementation of career education concepts in the local schools.

We offer these proceedings as documentation of what we have learned about career development for the hearing impaired. The year 1978 may be viewed as a turning point. As a result of the two conferences, the MSSD/NTID National Project on Career Education will continue to define and assess career development for hearing impaired students enrolled in grades kindergarten - 12. The sharing of effort and financial support by the Model Secondary School for the Deaf in Washington, D.C. and the National Technical Institute for the Deaf in Rochester, N.Y. is a landmark in its own right, and, hopefully, will serve as a model to other institutions which may benefit from the enhanced thrust of a combined effort toward mutual goals.

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I. INTRODUCTION

The initial meeting of school administrators in September 1977 identified five topics for the working conferences. They are:

1. Clarification of concepts related to career education.
2. Heightened awareness of career education and its relevance for the hearing impaired.
3. Information regarding what schools and programs have learned about implementing career education (what has worked; what has not worked).
4. The issues most urgently needing attention if career education is to be a reality for hearing impaired students.
5. Strategies to address the most urgent areas identified in number 4.

To address the objective regarding agreement upon a common definition of career education from the numerous definitions which abound in the literature, the planning committee supported use of the term as defined by Kenneth B. Hoyt, Director, Office of Career Education, USOE.

Dr. Hoyt was invited to deliver the keynote address at the first conference. Pre-conference reading materials, sent to participants about one month prior to each conference, were selected from among Hoyt's extensive monographs to provide participants with a common understanding of career education concepts as they relate to the classroom, to the counseling function, and to administrative decisions and commitments. The list of readings is found in Appendix A and may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. Hoyt's address to the first conference participants is presented

herein in a transcribed and edited version. A videotaped, signed version was sent to all second conference participants for viewing prior to attending the conference in September. In it, he addresses the obstacles which must be overcome if implementation of career education is to be successful.

Following Hoyt's paper is a presentation by Victor Galloway, then Director of Education at MSSD, who accepted a new position as Superintendent of the Scranton State School for the Deaf, Pa. in March 1979. Galloway examines specifically the relevance of career education for hearing impaired individuals, thus addressing objective number 2. His conclusion is that there must be intervention in the deprivation of a normal career development process, in the occupational stereotyping, and in the discrimination which deaf students encounter. He advocates career education as an appropriate intervention program. Galloway's paper, as it appears here, was presented as the keynote speech at the second conference.

Two other papers are included in this section to expand on the definition of career education and its relevance for the hearing impaired. Robert G. Sanderson, Director of Services to Adult Deaf, Division of Rehabilitation Service in Utah, has presented a vocational rehabilitation (VR) perspective. He points out that the need for directive counseling of deaf VR clients would be minimized by good career education programs in the elementary and secondary schools.

Dennis C. Nystrom, Dean of Career Education at Rochester Institute of Technology, has presented in his paper a challenging look at the needs of business and industry and how they should be addressed by career education.

These last two papers were prepared for inclusion in these proceedings and for presentation at the second conference in the event one of the major speakers should not be able to attend.

This section of the Proceedings, then, provides both a general perspective on career education and a specific focus on career development for hearing impaired individuals.

OBSTACLES AND OPPORTUNITIES IN CAREER EDUCATION

Kenneth B. Hoyt
Director
Office of Career Education
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The current career education picture has caused two very old sayings to run through my mind: (a) Adversity is the mother of invention, and (b) We never promised you a rose garden. Perhaps this presentation will help explain why I keep remembering those things.

The career education picture has never looked brighter than it does at the present time. Interest in and enthusiasm for career education continues to grow at the local, state, and national levels. At the local level, the number of communities initiating leadership for career education is increasing rapidly. So, too, is the interest and actions of state legislatures in enacting career education legislation and in appropriating state funds for career education. At the federal level, the number and diversity of national organizations, associations, and corporations endorsing career education has grown steadily over the last five years. Some federal career education legislation has been enacted and further federal legislative measures are currently being considered by the Congress. We have, indeed, come a very long way since 1971.

As the concept of career education has been clarified, the problems we face in converting that concept into effective implementation efforts have also become more apparent. The promise of career education remains much more evident than does its effective delivery. The time has come

to identify and to specify those basic restraints to implementation growing out of the career education concept. Only when such constraints are squarely faced can we plan effective solutions to overcome them.

It is important to note that the constraints have increased as the career education concept has been clarified. That is, we have chosen the hard route, rather than the easy route, in championing career education as a reform movement in American education. Neither masochistic tendencies nor simple naivete has led us in this direction. Rather, we have chosen what seems to be the best route to take toward a long-range, permanent reform effort. Had we not chosen this route, career education, like many earlier reform attempts, would have been a fad with a predictably short life span. Career education is too important and too badly needed to run that risk.

Here I would like to identify what I regard as the five major obstacles facing the implementation of career education. Following the identification of each obstacle, I would like to comment briefly on why we have chosen to face that obstacle and some of the current alternative solutions available for overcoming it.

I also want to discuss the very important aspect of implementing career education.

Obstacle 1: The Pendulum Problem

The first obstacle is one that I would call "the pendulum problem." Basically, the problem is one of bringing a proper emphasis to education, as preparation for work, among the basic goals of American education. The troublesome word here, of course, is "proper." There is no doubt but that more emphasis must be placed on this educational goal

than has been apparent during the last 50 years; nor is there doubt but that, if we overemphasize this goal, some of the other basic goals of American education may suffer. There is no doubt but that one of the reasons the vast majority of parents in this nation send their children to school is so their children will be prepared for work after leaving the formal education system; nor is there doubt but that parents also expect schools to accomplish other basic educational goals.

The acquisition of basic academic skills, education for good citizenship, the imparting of socialization skills, good physical and mental health, appreciation and understanding of our cultural heritage and promise, and preparation for home and family life have, for many years, been among the basic goals of American education. None is any less important today than it was in the past. Each represents a way of bringing purpose and purposefulness, meaning and meaningfulness, to the teaching/learning process. We must make sure that, as we emphasize the career implications of subject matter to students, we do not demean nor detract from any other basic goal of American education.

Any basic goal of education, if given proper emphasis, holds potential for positively affecting all other basic educational goals. That is why each is called a "basic" goal.

People such as we in career education, who concentrate our primary attention on only one of the several basic goals of education, must constantly search for ways in which our efforts can supplement and enhance, rather than compete with or impede, the attainment of all other basic goals. If we do not, our enthusiasm runs the risk of swinging the

pendulum too far in one direction; in which case, it will surely swing back, and we will have lost.

Career education has attempted to overcome this obstacle by placing a primary emphasis on the need for purpose and purposefulness among both those who teach and those who learn and a secondary emphasis on our goal of primary interest, i.e., education as preparation for work. We have, as a result, never claimed that our goal is the only one -- or necessarily even the most important one --for students, educators, parents, and the general public to embrace. Rather, we have consistently claimed only that one of the reasons students go to school is so they can prepare themselves for work.

The problem of what is a proper emphasis is, today, perhaps most clearly seen when we look at our system of higher education. For years parents sent their children to college under an assumption that the college degree would help them get better jobs. Yet among many college faculty members, this goal was not at all evident in their actions. In recent years the economic value of a college education has rapidly and obviously declined. As a result, we see many students and parents questioning the wisdom of college attendance and many colleges hurrying to strengthen their programs of professional specialization. Sometimes this has been done at the expense of the liberal arts, and, if so, the pendulum has swung too far. We are here referring to a proper emphasis on our goal. That can best be maintained by keeping in mind the perspective that what we seek is the sense of meaningfulness and purposefulness in the classroom.

Career education has urged those colleges who value the goal of education as preparation for work to demonstrate their values with operational efforts campus-wide. As part of this effort, career education advocates -- at least those of us in the Office of Education -- have tried to picture the importance of the liberal arts in attaining the goal of education as preparation for work. In doing so, we have pointed to the great potential the liberal arts hold for providing students with adaptability skills required to change with change. In asking the liberal arts to recognize their potentiality here, we have asked them to neither abandon nor downplay contributions the liberal arts make to other basic educational goals.

If career education is successful, most colleges and universities will change in two ways: (a) so as to implement their stated goal of preparing students for work, and (b) so as to emphasize and clarify the multiple goals of higher education. This is what we mean by maintaining a proper emphasis.

Obstacle 2: The Impotence Image

A second obstacle to implementation facing career education is what I would call "the impotence image." Most reform movements strive for success through seeking and then using power to convince people that change should occur. The career education concept holds that the greatest power of career education lies in its complete impotence, in its absolute dependence on the increased strengthening of a wide variety of existing educational programs. Career education has pictured itself as a concept to be applied throughout all educational programs at all levels of

education, not as a new kind of program to be added to others that now exist.

The basic reason for using this strategy is that it is reform of the entire system that we seek, not the overthrow of the current system, nor the insertion of a new, separate effort to be added to all others that exist. It is our contention that one does not accomplish reform through a system of "add-on" programs that leave the rest of the system free to continue as is. Instead, we seek reform of every part of the educational system at every level and in every kind of educational setting.

We do not seek massive amounts of new educational dollars. Instead, we ask that dollars now available to education be spent in a different fashion. We do not ask for a new kind of specialist at the building level. Instead, we ask all currently employed staff members to change their attitudes and their actions. We do not ask teachers to add new cognitive content to an already overcrowded curriculum. Instead, we ask teachers to utilize the total resources of their community to help students learn more of the substantive content the teacher is supposed to teach.

We do not ask for a new course or for new buildings carrying the label of "career education." Instead, we ask that we utilize existing courses, staff members, and buildings to infuse the career education concept throughout the system of education. We do not seek to bribe schools to change with large amounts of new federal dollars. Instead, we ask schools to change because they should. We do not value the power of position. We value only the power of persuasion. We value a new

kind of effort which asks the school to consider changing because its students need it to do so.

The dollars we seek for career education are primarily to be used for people change, not for program add-ons or the salaries of a new breed of educational specialist. True, we do seek to add career education "ramrods" at the community level but not at the building level. But that, we hope, will be paid for largely through redirecting current educational dollars. The cost of American education has risen very sharply in the last 20 years. Career education doesn't ask education to change in ways that will make it cost more. Instead, it asks the system to change in ways that are cost-effective.

Thus, career education does not seek change through bribes, orders, demands, or coercion. Instead, it seeks to create opportunities for internal changes in the attitudes of both educators and noneducators in every community, changes that will result in action, changes that will bring an emphasis to education as preparation for work.

Obstacle 3: The Definitional Dilemma

The third obstacle to be surmounted is one that I call "the definitional dilemma." This dilemma has arisen because of our attempt to redefine the four-letter word "work" and so to change the meaning of education as preparation for work. In view of the very widespread negative connotations associated with the word "work" on the part of the general public, this has become a very formidable obstacle indeed. There are many who still believe it is one that we cannot possibly hope to overcome.

We have attempted to redefine work in ways that emphasize the human need of all human beings to do, to accomplish, to achieve; to become someone through doing something; to emphasize how each of us can produce benefits for others, not how others can provide help for us. I like to think of it as emphasizing welfare of the individual rather than welfare for the individual. Work, as we have attempted to redefine it, becomes a humanistic rather than a purely materialistic word.

There are several reasons why we have created this obstacle for ourselves. First, if we believe that career education is for all persons, it is obvious that work in a humanistic sense will be denied to many if we limit our conceptual efforts to the world of paid employment. For many, the humanistic meaning of work will have to be found in productive use of leisure time. In addition, all persons are going to have to learn how to make more productive use of leisure time. Thus, we have added the concept of unpaid work, as well as paid employment, to the goal of education as preparation for work.

Second, one of education's basic tenets has been that society benefits most, indirectly, through meeting the needs of individuals directly. We do not want to try to change that tenet. The only way it can be retained is to redefine work so that it has a personal meaning for the individual, other than coping or relaxing. We firmly believe that, if this can be accomplished, both individuals in our society and the broader society itself will benefit. Career education seeks to help people find work, not just jobs. We cannot be true to our students if we attempt to, in effect, brainwash them to like some of the dehumanizing kinds of jobs now existing in the occupational society. Instead, we

must seek to help individuals in their efforts to humanize the workplace for themselves. Thus, we have added a major humanistic dimension to the goal of education as preparation for work. Work is a way of discovering who we are. Work is a way of discovering why we are and what is our basic purpose.

The human need to work continues to exist. It may be met for some people in unpaid work, in volunteer work; for others, in productive use of leisure time or in the concept of work within the home and family structure. However, our emphasis remains on benefit to the individual. Our basic assumption is that society will benefit most, indirectly, if we put our direct emphasis on help to the individual.

Third, in these times of rapid societal and occupational change, education as preparation for work can no longer be limited in meaning to the acquisition of specific vocational skills needed for entry into the occupational society. Instead, it must include providing students with adaptability skills, including the basic academic skills, effective work habits, a personally meaningful set of work values, career decision-making skills, job-seeking, job-getting, and job-holding skills. Education must become as concerned about helping its graduates get along and move up in the world of paid employment as it is with helping them gain initial entry into that world. Thus, we have added the concept of adaptability skills to the goal of education as preparation for work.

Fourth, changing social patterns that find more and more women in the labor force are making major changes in the home and family structure in the United States. These trends appear sure to increase, rather than decrease, in the years ahead. It is thus imperative to add the

concept of work in the home and family structure, for all family members, to the goal of education as preparation for work.

We see no point in trying to rekindle a proper emphasis on the goal of education as preparation for work if the goal itself is to be defined as it was 50 years ago. Education is a part of society that must help its students live in the present and prepare for the future. The redefinition of work that we seek, to help people understand and implement in their lives, is one that we believe is appropriate in today's society and will become even more appropriate in the years ahead.

Obstacle 4: The Teacher Trap

Fourth, we have created for ourselves an obstacle that I would like to call "the teacher trap." In brief, this obstacle has been created through our insistence that while career education is a truly collaborative effort, the classroom teacher is the key person involved in its success or its failure.

We have taken this position because of our belief that, if change cannot be seen in the teaching/learning process, then real educational reform cannot be said to have taken place. If there is any truth in the slogan that the business of business is business, then there is even more truth in the slogan that the business of education is education. The prime delivery system for education has always been the teacher. Career education seeks to change teachers' attitudes, knowledges, and experiences in ways that will lead them to change their actions so as to result in the effective implementation of the career education concept.

In terms of the history of education during the last 40 years, this is a most unusual avenue of use in attempting educational reform. During this period, the typical educational strategy has been one of adding new kinds of personnel who, initially, are charged with helping teachers help students and who then, after a few years, become so specialized that they profess to produce special benefits for students independent of those available from classroom teachers. Career education has placed its basic hopes and trust in the classroom teacher.

To overcome the teacher trap obstacle, career education has asked for released time for teachers to study career education and to devise means of infusing career education strategies into the teaching/learning process. Those who now urge teachers to "get back to the basics" must be willing to allow teachers the time it takes to devise means of encouraging students to learn the basics. Career education is one potentially very effective vehicle for accomplishing this goal. We have great faith that teachers are, in great numbers, both smarter and more creative than the educational "assembly line" has allowed them to be. Career education seeks to free teachers in ways that will allow them to demonstrate that our faith in them is not misplaced and that career education is a way of getting students to want to learn.

Obstacle 5: The Collaborative Quandary

Fifth, we face an obstacle I would label as "the collaborative quandary." Briefly, the problem is one of crying for educational reform while admitting, from the outset, that educators will never be able to bring about this reform by themselves. The problem may well be more

readily understood if we recognize that, in fact, it is community reform, not just educational reform, that we seek. That is, we seek changes in educators, in parents, and in members of the business/labor/industry community, all of which are directed toward helping students understand and capitalize on the changing relationships between education and work.

We have taken this action because we recognize that the world of schooling and the world of work can no longer be separated, either in segments of life space or in interaction, for most of our citizens today. Added to this is our conviction that sufficient resources exist now, in almost every community, to help most people understand and capitalize on education/work relationships much better than they have in the past, when various segments of the community went their own separate ways. Massive new programmatic attempts to help students solve the education/work dilemma should not be sought until we have first done the very best we can with the resources available to us. We are convinced that a "what's do-able now" philosophy of pragmatic idealism is preferable to our past behavior, which typically stemmed from viewing the problem with alarm and then theorizing about needed long-run, expensive solutions.

To overcome this difficulty, we have encouraged the creation and operation of Community Career Education Action Councils with representation from all three major segments: educators, the business/labor/industry community, and the home/family structure. In such councils, each segment seeks advice and consultation, as well as cooperation, from the other segments. In the long run, however, each is also charged with

a set of things to do, actions to take, not merely agreeing with actions others decide to take. It is an action Council, not merely an advisory Council, that we seek in career education. That is why we have, from the outset, pictured career education as a collaborative, rather than as a cooperative effort.

The art of compromise is crucial to the concept of collaboration. We know it is easier for each of us to work alone than to make the accommodations required for us to work together. But we have worked alone for far too long, and our students have suffered as a result. It is time we worry less about how much credit each of us gets and worry more about how much help youth will really receive. Under such arrangements, where evaluation must be student based, rather than program centered, it will obviously be much easier to assign blame than to award credit for the cumulative effort. This should not deter us.

Concluding Remarks

These are, in my opinion, the five major obstacles we have created for ourselves through the ways in which we have conceptualized career education. Many, many smaller ones also exist, but they need not be specified here. It is, as of now, still too early to determine whether or not we can overcome these obstacles, nationwide, and so accomplish the reforms we seek. The doubts that remain stem neither from a lack of resources nor from the lack of a reasonable rationale. Rather, they exist simply because we do not yet know whether or not people -- educators, members of the business/labor/industry community, and parents -- will come to care enough about the education/work dilemmas facing our youth so as to commit themselves to becoming active agents in devising and implementing solutions. I firmly believe that they will.

THE RELEVANCE OF CAREER EDUCATION FOR HEARING IMPAIRED INDIVIDUALS

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Before I address my topic, I want to share with you a cartoon, orginally penned by Jules Feiffer, the noted humorist, which aptly captures the career development experience. The caption reads, "When I was a kid - I used to dream of what I wanted to be as a grownup - a test pilot - cowboy - a ball player. Now I'm forty. And I'm not a test pilot, I'm not a cowboy, I'm not a ball player -and I'm not a grownup. Who ever dreamed it would be this hard?"

Who indeed? We all have come to realize, as we reach different stages of our personal or professional life, that the earlier expectations of what that role, position, or age would mean were based on misperceptions, ignorance, or lack of information. Attaining one's lifelong goal at age forty is at best difficult, and not achieving it, devastating.

The three basic premises of my presentation are:

1. Career education for hearing impaired individuals must be defined.
2. There is a need to create awareness of career education trends for hearing impaired individuals.
3. Future priorities for the education of hearing impaired individuals must be described.

In terms of these premises, we need to develop a number of assumptions underlying the development of an educational program for deaf individuals. They are:

1. The expectations of society for deaf individuals are similar to those for their hearing peers.
2. The social and economic needs of deaf individuals are similar to those of their hearing peers.
3. The range of individual differences among deaf persons is similar to that among their hearing peers.

Prior to exploring the implications of career education for hearing impaired individuals, it is important to consider the conditions that prevailed and to some extent resulted in the formulation of the career education concept. Career education emerged as a reaction to widespread criticism of American education, and concern that "too many persons are leaving our educational system deficient in the basic academic skills required for adaptability in today's rapidly changing society" (Hoyt, 1975). Hoyt lamented "the numbers of both overeducated and undereducated workers present in our work force, overemphasis of the educational system on meeting the educational needs of the so-called college bound." Too many persons are leaving our educational system at both the secondary and collegiate level without the required vocational skills, self-understanding, decision-making skills, and work habits for making a successful transition from school to work. Although these criticisms were leveled at the entire educational system, many criticisms are also quite relevant, as will be seen when we look at our field of education of hearing impaired individuals.

Thus, career education emerged as a reform movement, as an effort to revitalize the entire educational system in order to bring relevance and purpose back into education. Many different definitions have been offered for career education, but they all point to the same direction. The one definition chosen for the purpose of this discussion is the one to which Kenneth Hoyt has made major considerations:

> Career education is the total effort of public education and the community to help all individuals become familiar with the values of a work-oriented society, to integrate these values into their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.

There are three key terms in Dr. Hoyt's definition: total effort, work and personal value system. It is through an exploration of these key terms that the career education concept can best be understood. By total effort, it is meant that career education has sought to develop a partnership between school, home, and the business/labor community for the purpose of achieving the goals established for our educational system. Collaboration is essential for the success for career education, because it is not only the educational sphere which career education seeks to reform, but also the broader community. Career education seeks the assistance, support, and participation of educators, parents, and members of the business and labor community to develop programming that breaks down the artificial barriers that have isolated "the world of school from the world of work ..." (Hoyt, 1975). By

capitalizing on existing resources of the community, career education seeks to solidify the relationship between education and work.

Collaboration is also important within the educational program. For too long educators have argued over the goals of education and the priorities that must be given to meeting academic needs as opposed to vocational needs. The emphasis of our schools has been on educating and meeting first the needs of the minority of students who will later graduate from college programs. Career education is an effort to cut through this divisive debate and gain a commitment to programming based on the individual's needs in terms of his or her goals, interests, and abilities. Career education does not attempt to add new goals for education, but rather to establish the individual as the focal point for viewing educational goals. Nor does career education seek to address these refined educational goals through added-on programming that has typified other reform movements. Career education implementation is dependent upon successful infusion of career education into the regular curriculum by regular classroom teachers and counselors.

One more point, in regard to career education being a total effort. It is a small but important distinction necessary for a clear understanding of career education. Career education is an effort, not a process. By this I mean that career education is a comprehensive approach composed of planned activities and planned interventions with the goal of facilitating the process of career development. Career development, on the other hand, is the lifelong, person-centered process of assimilating and integrating career information, career explorations,

and career experiences, resulting in decisions about self, occupational education alternatives, and life styles and role options.

The second key term in the definition of career education that we are offering here is the term work. Dr. Hoyt (1976) defines work as "a conscious effort, other than activity whose primary purpose is either coping or relaxation, aimed at producing benefits for oneself and/or for oneself and other." This definition of work is important for two reasons: first, its implication of personal meaningfulness for the individual, and, second, the view of work as a human right of all human beings.

It is not the purpose of career education to prepare a young person for meaningless, irrelevant labor in order to assure that the machinery of our complex technology continues to function at peak efficiency. Rather, career education seeks to humanize the entire concept of work and assist the individual in making personally meaningful decisions about work and life roles. Dr. Hoyt makes the point also about the difference between employment and employability that is important for our conceptualization of career education. The goal of career education cannot be only to improve employment statistics by preparing individuals for jobs, through equipping them with specific entry level vocational skills; the goal must be to increase the employability of our youth. School learners must be prepared to make the transition from school to work with a wide range of skills and abilities. If our goal is to increase employment, one may become more concerned with the matching of individuals and jobs instead of being concerned that individuals have the necessary skills to implement the career goals that best suit that individual.

In order to prepare our school leavers for employability, we must ensure that they possess the following characteristics:

1. Basic academic skills
2. Good work habits
3. A personally meaningful set of work values
4. Understanding of the economic system
5. Self-understanding
6. Career decision-making skills

These are areas over which we as educators have some control. We cannot be sure that labor market conditions will be such that all those students prepared as automotive mechanics will find jobs. But through appropriate programming, if the student possesses those skills mentioned above, he or she will have the adaptability and self-presence to move into the world of work.

The above-mentioned list of employability skills compares well with the learner outcome or learner goals of career education.

Let me digress a moment to delineate for you the learner outcomes of career education in order that you may sense their comprehensive nature and that you may review the interrelationship that exists between them and our basic educational goals. Students should be:

1. Competent in the basic academic skills required for adaptability in our rapidly changing society.
2. Equipped with good work habits.
3. Capable of choosing and have chosen a personally meaningful set of work values that foster in them a desire to work.

4. Equipped with appropriate work personality, job-hunting skills, and job-getting skills.
5. Equipped with vocational skills at a level that will allow them to gain entry into and attain a degree of success in the occupational society.
6. Equipped with career decisions based on the widest possible set of data concerning themselves and their educational-vocational opportunities.
7. Aware of means available to them for continuing and recurrent education once they have left the formal system of schooling.

When students are prepared according to this set of criteria, our educational programs have indeed educated the "whole person" and have achieved the eighth goal, that of readying the individual to assume a fully independent existence in the larger society.

It is sad commentary that, in the vocational training programs available to handicapped students, placement decisions are often made on the basis of equipment availability and on labor market trends that indicate jobs which are no longer attractive to the non-handicapped. The individual needs, interests, or abilities are of lower significance. The goal of such programs is not employability but employment.

The third key term, personal value system, may be the most important term because it focuses directly on the individual. The role of the educational system in assisting the individual to develop his or her personal value system has been widely debated and many caveats offered. It is generally accepted that, although the schools do play a vital role

in helping their students to make appropriate decisions and to derive their values therefrom, the parents reserve their prerogative to provide their children with guidance toward a certain personal value system. It is probably appropriate for the vast majority of children who are in possession of all their faculties. It has been demonstrated repeatedly, however, that the parents of deaf children do seek guidance from the educational and rehabilitation agencies when it comes to establishing life goals for such children.

Far too many deaf students enter the world of work ill-prepared to make appropriate decisions that affect their own lives or to implement whatever they may have learned during their ten to fourteen years in school. It is a sad commentary upon the times to note that a large number of deaf students have become quite dependent on the largess provided by the various government agencies such as SSI (Supplemental Security Income for the Aged, Blind and Disabled), although they may come from well-provided families, drive their own automobiles, and attend colleges or other post-secondary programs. It has been argued that because deaf students must spend more hours in study than their hearing peers they cannot spare the time to work. The argument continues that time spent in co-curricular activities is just as valuable as time spent in work, if not more so. It is not the purpose of this discussion to argue against such premises, but rather to offer another approach to career education that will address all such concerns and to consider some of the possible strategies in implementing such programs.

What is it about deafness that suggests the need for departures from the typical approaches? A timeworn cliche is that blindness separates the individual from things and deafness separates the individual from people. Cliche or not, it is an apt observation. Being from the field of education of deaf persons or having been involved with deafness, this audience is well aware of all the ramifications of deafness; nevertheless, it should be emphasized that in this age of rapidly changing technology and the changing nature of the labor market, deafness presents new challenges that have only begun to be addressed, challenges that require considerations of possible changes in the educational programs for deaf individuals.

Let us return to the definition of career education given earlier. The problem as perceived here is the development of a personal value system, and we all know that one's personal value system is developed over his or her lifetime and that the first ten or fifteen years are probably the most crucial years. Interaction with and among the members of one's immediate family and with peers at school contribute heavily to the formation of a solid and viable personal value system, which in turn influences the manner in which decisions are made and life goals established. The hearing child is exposed constantly to the "values of a work-oriented society," and thus becomes aware of the problems and rewards inherent in a wide variety of occupations. Even if the hearing child should be a member of a nonsupportive family, nonsupportive in the sense that he or she does not gain the support or attention normally given to children of closely knit families, he or she is constantly bombarded with valuable information from the various television programs and other media. This child also learns a great deal about the careers of his or her peers.

It is true that, in spite of the advantages that a hearing child may seem to have, career education has been given an impetus on the national scale by the growing concern that the child is not as well informed and as prepared to make wise career decisions as his counterpart a generation ago. If today's hearing child has a problem, then consider the plight of the deaf child. As was mentioned earlier, deafness separates an individual from people. No one needs to tell you about the communication problems with which a deaf child is confronted as he or she grows up. You are well aware of the fact that television for the most part is useless for this child. As a consequence, the deaf child arrives at school with his or her personal value system still in an embryonic form. The school then has an awesome responsibility to help this child further develop his or her values and to expose him to the values of a work-oriented society.

Since the deaf child must continually play a catch-up game, his or her school must be willing to adapt its educational programs to meet his or her special needs. If co-curricular activities, work experiences, career exploration, and occupational education are to be considered equally important, then the school must be willing to incorporate all of these programs into the deaf child's regular, day-to-day educational program. The practice heretofore has been to consider such programs as afterclass or co-curricular activities. The classroom should serve not only as an instructional area but also as an arena wherein the deaf child is exposed to the values of society, one that is work oriented. He or she must be helped to understand that his or her exposure to the world of work and all of career-related programs are designed as a part

of the total educational program. In short, the school must help the deaf child develop his or her personal value system so that in later years he or she is able to consider various career options, make tentative plans, and finally, to make a decision on postsecondary plans. In addition, he or she must become equipped with the ability to make similar decisions independently.

My comments thus far, albeit lengthy, have been a mere preface to the major focus of my address--the relevance of career education for hearing impaired individuals. For the most part, career education is relevant because hearing impaired individuals are more similar to hearing individuals than dissimilar in terms of the career development process. To repeat the three assumptions underlying the development of career education programs for hearing impaired individuals mentioned earlier, they are:

1. The expectations of society for deaf individuals are similar to those for their hearing peers.
2. The social and economic needs of hearing impaired individuals are similar to those of their hearing peers.
3. The range of individual differences among the hearing impaired individuals is similar to that among their hearing peers.

It would be tempting to suggest that, on the basis of these assumptions, approaches to career education for hearing impaired individuals should be similar to those for their hearing peers; while many, if not most, of the concepts developed by leading authorities in this field are

certainly applicable to the education of hearing impaired individuals, the effects of deafness are such that some departures from the typical approach must be considered.

Deafness causes a breakdown in the normal career development process: acquisition and compilation of information, important tasks in the career development process, are disrupted because many avenues of communication are not accessible to the hearing impaired individual (Clarq, Speegle, and Johnson); natural exposure to types of information and experiences necessary to learn about different jobs are more difficult because of the hearing impaired individual's isolation from his or her community; nor can the hearing impaired individual compile as casually or as fully the career information necessary for vocational maturity (McHugh, 1975).

The career development process is further complicated for the hearing impaired individual by the introduction of additional criteria that must be considered by the hearing impaired individual as he or she assesses interest, skills and abilities; by problems that he or she can expect to encounter because of job-related communication, and by the fact that occupational prejudices and discrimination also await the hearing impaired individual seeking personally meaningful work. Underemployment, not unemployment, has been the major problem confronting hearing impaired individuals.

Although deafness impedes the normal career development process, the end goals are not different for the hearing individual and the

hearing impaired individual. The relevance of career education for the hearing impaired lies in goals that are established for the school learner and the intervention strategies that are proposed for meeting those established goals.

Career education represents an effort at optimizing the potential of the individual through active intervention. The hearing impaired individual is isolated from many normal and informal sources of information and career exposures. Whereas the hearing child functions as a participating member of the community, within an environment understood and acted upon by the individual child, the hearing impaired child has been with an environment, but not part of it. Deafness has isolated him or her from the environment. The relationship within the environment is not understood, nor is he or she able to act upon that environment. As a result, the hearing impaired child cannot have a true sense of identity, or direction in our society.

Occupational sterotypes and discrimination based on misconceived notions regarding the abilities of the hearing impaired individual have been partially responsible for the limited occupational opportunities that have existed for the hearing impaired individual. This situation has been extended by our past poorly organized efforts at providing the necessary career information and experiences to our hearing impaired youngsters. Our past efforts could best be characterized as promoting employment instead of employability.

Career education efforts based on the concepts and philosophy as espoused by Dr. Hoyt and others, if applied to our programs for hearing impaired students, could assist in opening up occupations previously considered not appropriate for the hearing impaired.

Career education for the hearing impaired can also bring meaning and purpose to our classrooms. Through infusion of career education skills, communication skills become more important when the hearing impaired individual experiences firsthand the frustrations found in the work place. Language and reading become important as an alternative vehicle for communicating and enabling the hearing impaired individual peer access to positions which reflect his or her knowledge and ability.

Because the hearing impaired student cannot gain career exposure, knowledge, and information in the same manner as the hearing student, career education programs must be developed that open the community to the hearing impaired student. These programs must utilize the many and varied resources of the community in the career development of the hearing impaired student through equal access to exploratory activities available in the community. Career development cannot be accomplished by career education programs locked in the school. Community involvement is essential. A program that seeks to develop and prepare both partners, the community and the students, will provide a mutually rewarding association and will do much to end the isolation and segregation that has been experienced by the hearing impaired person. Only a program that incorporates extensive use of the community in the career exploration process will provide equal access to information needed if the

hearing impaired are to develop functional career plans. Only through sufficient contact with the hearing impaired will the attitudes and misconceptions fostered by ignorance be eliminated; open the minds and eyes of the community to the potential contributions the deaf have to make!

Career education programs can provide the active participation of the individual in the assimilation of knowledge and information which will assist in the development of the whole person, a person that reflects an inner peace that comes from self-confidence and an active personal value system. Through career education the individual's freedom to choose and implement a personally rewarding career decision is protected.

Through career education hearing impaired individuals will gain greater access to the educational resources of the community and will be better prepared to make and implement career and life choices which reflect self-understanding and self-confidence, and which attempt to maximize their own potentials. Career education is not another add-on program that will overburden an already heavy educational program. Rather, career education is a relevant effort which can revitalize and refocus the existing educational goals and result in individuals who leave our schools better able to make the transition to the world of work.

THE NEED FOR CAREER EDUCATION:
A V.R. Perspective

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Good afternoon, ladies and gentlemen. It is, for me, a real pleasure to visit again one of the two most unique educational institutions in the world, and it is an honor that I sincerely appreciate to be asked to participate in a conference like this. Perhaps I am even flattered that someone should think that I have some thoughts to share with you that are worth hearing and seeing.

With the caution born of a few years of experience, I must make a qualifying statement:

The characters and incidents in this presentation are purely fiction; any resemblance to persons hearing or deaf is strictly coincidental. Further, the views expressed are those of the author and do not necessarily reflect the official policy of the Division of Rehabilitation Services, Utah State Board for Vocational Education, nor any other DVR. (How's that for protecting my tail?)

A Look at Vocational Rehabilitation

Before tackling the matter of attitudes of vocational rehabilitation (VR) toward career education for deaf people, I believe it is appropriate to clarify certain aspects of VR that are frequently not understood or are misunderstood by educators, parents, and disabled people who apply for services. There are three things I wish to stress:

1. The VR program is established by Federal law. Regulations governing the operation of the program are promulgated by the Secretary of Health, Education and Welfare through the Rehabilitation Services Administration. In the parlance of the VR people, the Federal Register becomes the VR operations "Bible". Money for the program is appropriated by the Congress annually, as for any other federal program. Presently, the cost of the program is shared by the states, on a state-20 and federal-80 basis.

2. Initially, the VR program was established for the purpose of rehabilitating the disabled veterans of World War I, providing for these people who had served their country a new start in life in keeping with the limitations imposed by their disabilities. The idea was to train, retrain, physically restore, and ultimately to place a disabled veteran in a productive job. The emphasis was upon restoring to a former capacity --Webster's definition of rehabilitate. The program proved to be so successful that, as the years passed, its scope was broadened to encompass all disabled people and not merely veterans. The Rehabilitation Act of 1920, also known as the Smith-Fess Act, was the turning point, the landmark law of the rehabilitation movement, expanding services to people who were disabled by other than wartime injuries or who were born with disabling conditions. Amendments and revisions of the law, particularly in 1943, 1954, 1965, 1967, and the completely rewritten Rehabilitation Act of 1973, made the rehabilitation movement the third greatest thing ever to happen to deaf people in the USA. The first, of course, was the establishment of the first permanent public school for

the deaf in our country, and the second greatest happening was the establishment of the world's first college for deaf people, Gallaudet. And, to continue great happenings, the fourth greatest for deaf people was the conception, the dream, the hard work, the law, the construction, the coagulation, and dedication of the National Technical Institute for the Deaf.

I am talking, of course, of the chronology of these events, these heroic monuments to the consideration and love of men and women in positions of power for their deaf children, brothers, sisters, and friends, and not of their comparable importance or value. One cannot put price tags on human values, nor measure the value of contributions that each of these events has made in the lives of thousands of deaf people in our country and in many other countries, as well.

Of course, putting rehab in third place reveals one of my many biases: I am a rehab man, as you may have guessed, but before you tee off on me, be aware that I am also an educator, or try to be.

3. The federal regulations that govern the VR program are narrow, specific, time- and cost-conscious, and focus on the individual. This is completely different from general education, which encompasses the whole spectrum of human knowledge and is a continuing process dealing with masses of people. For contrast, consider the classroom of 25 to 200 students with one instructor attempting to impart an understanding of a particular subject, and compare it with a rehabilitation counselor sitting with one client in his or her office, helping set a goal, counseling on job-seeking skills or personal behavior, and so on. The counselor

may also have 200 clients, but each one is an individual, and the counselor must have a one-to-one relationship. There are different goals and objectives, and different financial, physical, emotional, psychological, and social needs to be understood mutually. Each person must have an Individual Written Rehabilitation Program that he or she helps to develop.

So you see, there is a remarkable difference between mass educational procedures and one-to-one rehabilitation counseling. I will touch again upon this in a moment.

A Look at Career Education

I wish to share with you what I believe to be a model of the career education concept for the public schools as developed by the staff of the Utah State Board of Education. I'll give you a moment of blessed silence while you glance over it rapidly--this is a little hang-up I have. I believe that deaf people should be given an opportunity to look at slides and transparencies without developing double strabismus while simultaneously trying to read them and watch an interpreter.

APPENDIX B

Goals of Career Education in Utah Schools

I. Understanding Oneself and Relationship with Others

Goal: Individuals will develop a sense of self-worth and a positive attitude toward others.

Subgoals

1. Recognize that career selection should be related to individual interests and abilities.

2. Recognize one's own set of values as well as others' values in relation to what or whom.
3. Develop attitudes and personal characteristics necessary in getting, holding, and advancing in a chosen career.
4. Recognize one's own strengths and weaknesses and how others differ from him or her.
5. Understand why community success is dependent upon productive individual workers.
6. Recognize his or her importance as a worthy member of a group.

II. Career Orientation and Information

Goal: Individuals will develop a growing awareness of career opportunities throughout the education program.

Subgoals

1. Understand the variety and complexity of careers and career opportunities in the world of work.
2. Determine the basic characteristics and and qualifications related to preparation for the performance of the major tasks associated with various careers.
3. Gain an understanding of life styles associated with occupations in various clusters.
4. Recognize that work has dignity as it contributes to society.

III. Economic and Consumer Awareness

Goal: Each individual will understand the operation of the economic systems in our society and factors related to the national, local, and individual economy.

Subgoals

1. Develop an understanding of the need for work and the law of supply and demand as applied to the exchange of goods and services.
2. Develop concepts of career potential, the costs of preparing for a career in relationship to expected results.
3. Understand the functions of financial institutions in society.
4. Understand how economic concepts related to income and consumer competencies as related to expenditures affect careers.
5. Understand how productivity affects the economic system.

IV. Career Skill Exploration

Goal: Individuals will acquire a knowledge of the skills necessary to function in selected job roles and career fields.

Subgoals

1. Develop an understanding of the materials used and skills associated with business, commercial, and industrial activity and production, and be exposed to equipment and materials associated with carrying out these skills.

2. Develop the educational and occupational understanding regarded as basic and important to moving on to the next stage of preparation for and/or entry into the career area of their interests.
3. Understand that an individual may be qualified to perform in many different occupations and that any occupation may accommodate a variety of individuals.
4. Identify particular attitudes and abilities necessary to achieve success in various career clusters.

V. Decision Making and Planning

Goal: Individuals will learn the steps in decision making and how to effectively plan for career development in an informed and responsible way.

Subgoals

1. Understand that the decision-making process includes responsible action in identifying possible alternatives, selecting the alternative most consistent with one's values and goals, and in taking the steps necessary to implement the chosen course of action.
2. Become proficient in the process of identifying, gathering, and using resource information as part of the process of making decisions (related to career choice).

VI. Specific Skill Development and Application

Goal: Individuals will develop skills, knowledge, competencies, and attitudes necessary for career entry or for next steps such as technical schools, universities, or family life.

VII. Placement, Stability, Advancement

Goal: Individuals will be able to demonstrate the competencies necessary to acquire employment or move to the next level of training, be successful on the job or in further training, and continue to advance in the career of their choice.

Subgoals

1. Understand placement processes, including the use of facilitating agencies, and be successfully placed in the next step of career development.
2. Develop the basic work habits and attitudes regarded as necessary for entry into and performance in the occupation and career of their choice.
3. Possess attitudes which will allow them to be flexible and capable of taking advantage of advancement or retraining opportunities as they arise.

There is much more to this; I have left out the first five pages arbitrarily in order to keep this paper to speakable size. I believe the Board's position paper is a great one, one that shows excellent understanding of the whole career education concept. It was adopted June 16, 1978, by the Utah State Board of Education as a final paper and revision of several earlier efforts.

As a member of the staff of the Division of Rehabilitation Services within the state education agency, it is incumbent upon me and every member of the staff to support this policy. I do. It is a great thing, in my opinion, for the public schools.

However, I do see certain difficulties in the implementation of this model plan for career education with respect to deaf pupils in day classes, for integrated deaf students in large public schools, for children in day schools for the deaf, and for children in residential schools for the deaf--in short, for deaf children in general. It is going to take considerable time and be very difficult to implement a beautiful plan like this for normally hearing children in the public schools; I think it will be much more difficult to get it into gear for deaf programs.

Let's take a look at the transparency again. III. Economic and Consumer Awareness. "Goal: Each individual will understand the operation of economic systems in our society and factors related to the national, local, and individual economy."

Now, assuming that all of you have a good education behind you, may I ask those of you who understand the operation of our economic systems to please, please raise your hands? One more question. How many of you believe that today's deaf graduates of an average school for the deaf also understand the economic system?

Thank you. I think we have our work cut out for us. I also think that we will have one hell of a time trying to make the kids understand the meaning of the words "system" and "economic", either separately or in the sense of this Goal III.

At this point, I wish to summarize what I perceive to be several differences--but by no means all of the differences--between career education and rehabilitation.

Insert Table here

I mentioned the Individual Written Rehabilitation Program (IWRP). The newest wrinkle in education of handicapped children is the Individualized Education Plan (IEP). Rehabilitation has been using the IWRP for quite some years now, and counselors have developed considerable skill in its use. Here I have a copy of the Utah Rehabilitation IWRP.

There are two pages of fine print, which are not amendable to good projection, so I'll read a few key points to you to stress what I have been saying about the essentially narrow approach of rehabilitation--sort of overkill, I admit.

Note that there must be a vocational goal, which can be either a general occupational grouping or a specific occupation. For example, a person may wish to work at any position in a bank, so chooses the general occupation of banking; on the other hand, a person may wish training to become a machinist, in which the specific occupation would be listed simply as machinist.

Training Objectives: These must be appropriate to the occupation listed, such as, in the above example, graduation from a business college with a major in banking, or graduation from a technical/vocational school or college with a certificate of competence in machining.

Service: Payment of books, supplies, tuition fees, tutoring, and oral or manual interpreting.

Restoration Objectives: This, in the case of a deaf or severely hard-of-hearing person, could be the restoration or improvement of

DIFFERENCES BETWEEN CAREER EDUCATION AND VOCATIONAL REHABILITATION FUNCTIONS

Career Education	Vocational Rehabilitation
Broad occupational information imparted to masses of students.	Narrow: Specific vocational or occupational goal must be stated for each individual; limited to the handicapped.
Generally, focus in on children in the kindergarten-12 school years; continuing, open-ended process ongoing with general education.	Focus is on disabled adults and young adults who are ready or nearly ready to enter the workaday world or to enter higher educational and/or technical/vocational training programs; and upon restoring disabled people to productive employment.
No defined plan for individuals.	Individual Written Rehabilitation Program. Details spelled out: goal, objectives, services to be provided, costs, etc.
Time limit: Normally, graduation from school ends the process.	Specific time limit spelled out in IWRP--beginning and ending time for training--depending on nature of training.
Costs: Covered in general education appropriation of the legislatures and from school district taxation for the entire general education program.	Specific cost of each service is stated in the IWRP. Each counselor budgets his or her caseload money. Total spending of a State DVR is limited by the Federal allocation formula on a 20-state and 80-federal basis.

hearing, or prevention of further deterioration or damage. Of course there could be other physical and mental health restoration objectives.

Service: Provision of the needed services, such as payment of a surgeon's fees, hospitalization, purchase of hearing aids, and so on. I wish to emphasize the clear difference between a restoration objective and the service needed to accomplish that objective.

I do not wish to belabor this subject; it is, I feel, enough to point out that the counselor has a very strict sort of operating program and cannot merely hand a client a package of money and tell him or her to go to school.

To all of these requirements, and others, of the IWRP we also add that of production on the part of the rehab counselor. He or she has to "close cases status 26" at a good clip, which means in suitable employment, and it has to be documented; it cannot be a work of fiction. Finally, we also require that the rehab counselor be able to read and write!

So shed a tear, and give a moment of silence to the greatest guy on earth--the R C D!

Career Education--A V. R. (my) Perspective

Career education--and I need not define it for you since many others have done so more than adequately (and especially Dr. Kenneth Hoyt)--is vital to rehabilitation. It is the career-oriented handicapped youth who is easiest to manage, and who enables the RCD to conserve financial resources. The person who has no idea of what she or he wants to do or be frequently forces us to make decisions wasteful of time, energy, and money as she or he vacillates, changes directions, drops out, or stagnates in indecision. This in turn sometimes leads counselors

into the trap of being directive, just what a manipulative client may wish, so that if something goes wrong, "Well, the counselor pushed me into doing something I didn't really want in the first place." And on we go with the game.

By contrast, the deaf youth who has been career oriented in a carefully structured, comprehensive school program, who comes to us and tells us he wishes to be a medical technologist, a draftsman, or a chemist, shows clearly that he or she has the understanding of what it means and (hopefully) the motivation to succeed. That youth is halfway to the goal. We greet that person with open arms; it is he or she who is easiest to assist, easiest to train, easiest to place, and, since we rehabbers are humanly lazy, it saves us a lot of work. Such a person makes us look good to supervisors and administrators, who in turn want to look good to the RSA and the Congress.

I would like to add a word of caution. While I do believe that virtually all education is career education, whether it be professional, technical, or liberal in nature, I also believe that every individual should have some understanding of himself or herself, of society and the culture in which he or she operates, of his or her own impact on people; call it a liberal education if you wish. I do not think that we should create a race of automatons, trained to tighten bolts on an assembly line as did Charlie Chaplin in his acutely perceptive movie, "Modern Times," of long, long, ago, which was way ahead of its times. So, in my opinion, career education does not necessarily become vocational education; rather, it can go hand in glove with a liberal and broad education. I would also like to see youngsters who can read and write when they graduate!

I would hope that each of us is continually aware of the common complaint of many hearing students, that they cannot see the relevance to them of history, literature, economics, and so on, taught by dry, dull, muddling, and boring teachers, when they plan to be farmers, plumbers, and mechanics. Deaf students have the same feelings, although they may not be able to articulate them so well. The challenge, and I realize how tough a one it is, is to stimulate the little devils into using their minds as easily as they use their hands, to make learning a fascinating mental game, as much fun with the mind as with the body in baseball, basketball, football, and track. A teacher who can do that, who can convince deaf youngsters that those who can use their minds will be better on the sports field, has won the battle for us. It's the smart, crisp-thinking player who becomes the superstar, not the slow-witted brute.

Summary

Vocational rehabilitation greets the career education concept with hosannas and cheers. It may be that this will see a new era of mutual good feelings and cooperation between education and rehab, and smooth over those past conflicts in which rehab blamed education for the virtual total naivete of deaf youths toward the workaday world, and education in turn snarled back that we "did not understand the problems of cramming education into little, unwilling deaf heads."

THANK YOU.

CAREER EDUCATION: A Good Seat Facing the Wrong Direction

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Career education has grown dramatically during the past decade. It has become a significant component of the educational system in most elementary and secondary schools throughout the nation. In many states, career education is the primary thrust of the postsecondary community colleges. Federal resources are now being spent on pilot and exemplary programs in the liberal arts and science colleges and universities.

Career education has gained considerable support from the employment sector because it has promised the complete career development of individuals who possess the technical skills, personal competence, and commitment so desperately needed by the business community. At a most propitious time, career education seems to be promising a rekindling of work values in America.

All of this is good. It represents further maturity of the educational system of this country. However, along with maturity, growth, and success comes the need for careful self-appraisal and continuing change. Like a theatre in the round, the world of work and the function of people therein is dynamic and operates in a multitude of settings. Career educators and program developers, willing to assume one seat and able to focus in only one direction, will miss much of that which is important to the continued career development of people. We have spent the first act looking at one aspect of career education, and it is time to glance with more interest at another.

Roots in the Behavioral Sciences

Career education grew out of career development research and commentary. The early work of behavioral scientists such as Parsons, Super, Roe, Holland, and others provided the foundation for the movement. This early work focused on self-concept development, decision-making skills, and broad occupational classifications. More recently, the strong career guidance effort has launched new behavioral scientists to the fore. There can be little question that career education has a firm and contemporary base in the behavioral sciences.

Focus on the World of Work

Nearly all models of career education have one thing in common. They put equal emphasis on world-of-work skills and information and on self-concept development. To date, however, this equality of emphasis exists only in the models. In practice, the occupational environment or world of work is accorded only secondary level treatment.

There are several reasons for this:

1. The fact that the second element of most models focuses on such a broad concept as the "world of work" makes it difficult to design appropriate learning experiences. Appropriate specificity has not been developed.
2. Career education is deeply rooted in the behavioral sciences and thus dictates that the majority of expertise brought to career education be from that area. Notable professors and researchers train graduate students, who are employed, because of their experience, as leaders of career education programs.

3. Most employment data used in career education programs come from local, state, and federal governmental sources. These data, extremely out-of-date when published, are analyzed, categorized, and defined by government employees who know little, if anything, about the industrial, business, and health care sector. Additionally, those reporting the information may not always be accurate or even familiar with the data they are reporting.
4. In an effort to build closer relations with the employment sector, most career education programs support business/industrial advisory committees. However, educational advisory committee service is part of the job description of industrial relations, personnel, and public relations people in industry. For the most part, these individuals are trained in the behavioral or social sciences and are somewhat removed from the operational elements of their businesses.
5. Technological and specialized process development are often the causes of new and emerging careers (also unemployment). Because of the competitive nature of business, industry, and even health care, such innovation is seldom made available for general distribution. It is, however, necessary for sound career education planning.

What Career Education Must Not Be in the 1980's

Much has been learned about career education during the past decade. This educational process has grown to operational proportions in a

majority of the elementary and secondary schools in this country and in Europe. The community colleges in most states have developed rather sophisticated models of career education. Colleges and universities are beginning to adopt various career development components, and in a few instances, total career education efforts are being integrated into the academic scheme of things. In addition to knowledge and experience gained regarding the operation of effective career education programs, much has been learned about what career education should not be. It should not be . . .

a new vocationalism which separates specific occupational skill competencies and knowledges from the broader educational perspective of the "whole" person.

an educational process that focuses entirely on self-concept development and personal gratification at the expense of real skills in dealing with a rapidly changing world of technology.

an educational system based on the hysteria associated with fluctuations in human resource supply and demand. It must be based on "prototype" models.

an educational process so focused on the job competencies and skills that young people are stifled in regard to their own creativity and imagination.

a series of "resource centers" where people come to learn the history of various careers rather than the future of work.

an educational process that begins to see itself as a discipline or content-based program. It is an educational process, nothing more--nothing less.

an indirect labor cost center that can neither qualify nor quantify the results of its efforts.

Priorities for the Future

If career education programs in higher education are to meet the expectations that many have for them, increased emphasis must be placed on the world-of-work component. This includes the need to more clearly define the work aspect of the career development process. In addition, career education must identify the relationship that exists between the academically-based programs and the career education function. It must also assure that career education professionals have the skills and experience necessary to deliver their part of the total program.

Career education, especially the world-of-work component, must be organized and delivered differently in the technical institutes than in the liberal arts and science colleges.

Following is a list and description of priority areas that must be included in the world-of-work aspect of career education.

Operations Level Data Collection and Analysis

In higher technology areas, education and industry must develop closer working relationships to assure the appropriate development of human resources. This is essential for long-range planning.

Available labor statistics reflect "what is" in terms of human resource demand. Even locally generated manpower statistics reflect the current needs of business and industry. These data and information are entirely adequate for planning career programs of less than college level. However, college level career programs should prepare young people who will be entering technological careers five years after programs are begun. Technology, and hence, human resource demand change significantly in a five-year period.

Like everyone else, the industrial and business sector is mostly concerned with current needs. College relations and personnel departments are charged with the responsibility of recruiting graduates to fit contemporary positions. In many cases, these positions have changed dramatically during the past five years. Therefore, much of the input from these people does not reflect forward thinking and future technology. Career education program planners must be in constant touch with the operations level and corporate research and development people to continually assess trends in human resource demand. These trends must be translated into prototype educational programs for the future.

At a recent visit with a top level corporate official in a major southwestern electronics firm, this concept was confirmed. Study and significant developmental work is under way in the design and use of

robots in the manufacture of electronic devices and assemblies. It was indicated that people working in this evolving technology need skills in engineering, computer science, and the behavioral sciences. The robot is a new and evolving technology for which very few people are being prepared. During the same visit, personnel people indicated their responsibility for hiring 250 traditional engineers to work in current operations throughout the world. Although a robot was delivering their mail, they were not charged with the responsibility of seeking out programs that prepared "robot design engineers." This is, of course, only one small example of the effect changing technology will have on human resource demand. Such information must be acquired through contact and trusting relationships with operations level people.

Systematic Analysis of Supply

Most career education institutions utilize the same sources of human resource needs assessment data. In some cases, independent surveys of local service areas are also conducted. In the main, however, if national data indicates a need for industrial technologists, each higher education agency bases new program development on that information. As a result, supply will often exceed demand in a relatively limited amount of time.

Career education research functions should conduct careful and close monitoring of the primary competitors in higher education. This supply information is essential to effective program planning and development. This function, while often implemented by state level higher education agencies, is not done accurately on a national level.

For example, less than a decade ago, a national need for college trained accountants was identified. This need was highly publicized in popular periodicals and higher education journals. As a result, countless colleges of business began to expand their accounting programs. Parents, aware of employment opportunities in this area, began to encourage their youngsters to attend colleges where accounting was offered. This year, one university in Arizona has over 2,000 students enrolled in accounting.

Detailed Succession Studies and Programs

Career educators know very little about what it takes to move vertically and/or horizontally in the organizational structure of the modern business enterprise. "Succession" in the business sector is a very complex issue confounded by a multitude of variables. Literally hundreds of popular books have been written on the subject, but little substantive research has been conducted. The decade of the 80's will require career-oriented institutions to develop innovative programs for practicing professionals interested in both vertical and horizontal mobility within single corporations and among different companies.

A case in point is one of the world's largest energy companies. This large oil corporation has a division charged with the responsibility of providing services to top corporate officers regarding personnel selected from operations throughout the world who would be appropriate people to move to vice-presidential level positions. The Succession Planning Services division plays a significant role in top level management development.

Information for such research is available. However, Department of Labor studies do not provide the necessary data. Career education professionals will have to work closely with private business and industry and with large and reputable search firms to determine what makes succession possible and what skills graduates must possess to meet their personal career goals and objectives.

Focus on Multiple Careers

Dual or multiple careers, both consecutively and/or concurrently, must be a component of career education programs in the 80's. People are no longer willing to spend thirty or forty years in the same career field, much less work in the same company or agency. Federal legislation extending the effective working years, increased leisure time, increased career specificity, and the need for more personal income are some of the reasons that multiple careers are becoming the rule for many people.

Career Productivity

The individual productivity growth rate has dropped considerably in the United States during the past decade. After World War II and prior to 1967, the productivity growth rate averaged approximately 3.2 percent per year. Since 1967, the United States productivity growth has dropped to a low of 1.5 percent in 1977. A slight increase has been noted this year, but it is not expected to continue. Our productivity growth now lags behind countries such as West Germany, Japan, and Sweden.

Career education programs must begin to deal with this issue. It is particularly significant in higher education because most graduates

enter technical and professional careers, where the decline in productivity appears to be the greatest. These sources of indirect labor costs are now under study in nearly all major corporations. Many economists believe that the only real answer to inflation, unemployment, and the decline of the American dollar in foreign markets is to increase our productivity.

Within the past year, Dr. C. Jackson Grayson, formerly Dean of the College of Business at Southern Methodist University, organized the American Productivity Center. During this time, major industry and labor have donated in excess of $11 million to the Center to support research, program improvement procedures, and the dissemination of information relative to this important economic concern. Career productivity is a topic that must be addressed by higher education in both undergraduate preparation programs and special continuing education offerings.

Individual Imagination and Creativity

Innovation, imagination, and creativity seem to have reached an all time low in the American business enterprise system. Some business leaders blame this on factors such as excessive governmental intervention, unfair anti-trust regulations, and lack of a national policy on the export of technology. Excessive governmental intervention is somewhat difficult to substantiate. However, in 1977, fees and royalties on U.S. technology exported to other countries exceeded $2.9 billion. This figure is excessive when compared to $666 million exported in 1965. Recent court anti-trust proceedings regarding companies such as Kodak,

IBM, and Xerox seem to indicate a trend toward the use of liberally interpreted Federal law to stifle corporate research and development.

The greatest problem, according to many, is the lack of creativity and imagination exhibited by individual employees at all levels. This individual creativity has resulted in thousands of major technological developments over the past decade. Technological growth creates jobs in new and emerging career fields. Without the growth, full employment will not be a reality in the 1980's.

Recently, several Rochester firms sponsored many of their management personnel at an extremely expensive, short-term training program offered in this community. This training program focused on developing individual creativity and imagination. It was very well attended.

International Business and Economics

A young, locally grown electronics firm does in excess of forty percent of its business outside of the United States. Over twenty-two thousand Japanese nationalists reside in New York City, working in over four hundred-fifty Japanese firms based there. Foreign cars account for forty percent of the new car sales in California. Coca-Cola is sold in nearly every country in the world. Your new shirt or blouse was probably made in Taiwan. The U.S.S.R. has captured the world wristwatch market. "Kodak film sold here" signs may be found hanging in front of shops in the Far East. The U.S. dollar has dropped sharply in relation to other foreign currency.

It is truly a world market governed by worldwide economic policy and procedure. The majority of college graduates with technical and

quantitative degrees will work in foreign countries on short- or long-term assignments during the next decade. Career education must be providing the programming necessary for this multinational business revolution.

Summary

Career education must change if it is to meet the career development needs of people during the decade of the 80's. Not only must the focus on self-development continue to grow, but radical changes in the approach to the study of work must occur. Career education must begin to deliver on its promises. It must truly prepare people who possess both personal and occupational skills and who are aware of the reality opportunities and limitations of the world of work.

Career education in the secondary schools, community colleges, and liberal arts institutions must place a significant amount of emphasis on self-concept development and general career classifications. However, in technologically oriented institutions, career education must turn its seat in a different direction. That direction must be toward specific aspects of the world of work where educators have place too little emphasis in the past.

II. WHAT HAVE WE LEARNED?

The third objective, to share the career development strategies which have or have not worked well for the participating schools, was accomplished by grouping participants according to the role they serve in school (teachers, administrators and counselors). These groupings were established to identify any differences in perspective among the three groups.

Prior to the first conference, three of the participating schools were contacted and were asked to identify and be prepared to discuss three strategies which had worked for them and three strategies which had not been successful. Each school was asked to briefly summarize their experiences with these strategies and forward them to the facilitators prior to the first conference. The strategies were clustered into the areas listed below. This list was used to guide the discussion regarding what we have learned with respect to:

1. The use of community resources
2. Work experiences
3. Infusion compared to separate curricula
4. Developing our own career education curriculum and materials
5. The value of commercially available materials vs. the use of external developers

6. The preparation of teachers, counselors and administrators
7. Facilitating continuity within the transition between lower, middle, and upper schools

Editors' Summary of Conclusions

Discussion during this workshop portion of the conferences revealed a number of high and low points in the experiences of these career education experts.

An important conclusion which surfaced several times in the discussions is that money is not the criterion for success of a program. The success or failure of past efforts to implement career education in schools and programs for the hearing impaired seemed to depend on administrative commitment and teacher enthusiasm. More will be said about these issues in the next section of the Proceedings.

The most difficult of all efforts to implement was the concept of infusion. Because it is so comprehensive in its effects upon every teacher, in every subject, and because career education has been aligned with either the pragmatism of vocational education or with the intellectualism of theories of career development, teachers have failed to evidence much enthusiasm for "doing" career education themselves, even when they testify to the need for it.

It was also obvious from the discussions that teachers are being prepared for their classroom role with absolutely no knowledge of nor appreciation for career education. They don't understand the career development process or the special relevance which career education must

have in the school experiences of a deaf student. This conclusion was further supported in the outcome of the urgency rating which is described in the next section: the need for inservice training was rated most urgently in need of attention and the most important issue in career education of hearing impaired students.

The most successful strategies have included systematic materials development using consultant/teacher teams and community collaboration for resources and work experience contacts. Some commercially available materials have been successfully adapted, but teachers see the most utility in materials they were involved in creating.

The remainder of this section describes the experiences of teachers, administrators, and counselors. It is interesting to note that not only do the three role-alike groups seem to agree with each other, but between the two conferences there is also high agreement, in spite of the audience differences.

What Have We Learned about Use of Community Resources?

Teachers' Perspectives.

Participants in the teachers' group at the first conference described several successful uses of community resources, both inside and outside of the classroom. Resource people from the community were invited to speak to students about their own careers. Some schools have utilized the Creative Research Endeavors in the Education of the Deaf (CREED) model, and have implemented field trip programs in cooperation with

their local business community. It has been found very helpful to have a person responsible for coordinating community contacts and contacts with deaf employees for potential field trips. This may sometimes be done by the vocational adjustment counselor.

Direct student participation in the community was sometimes accomplished by placing students in local businesses as volunteer workers. A community volunteer was recruited to transport students to their assigned placements. The public vocational schools integrated deaf students into their community work program. They noted that this may be facilitated in some states by the extra state aid monies for handicapped students received by vocational schools.

Participants in the teachers' group at the second conference described varied experiences they had had using community resources in career education. Community resources were good sources of job information. Advisory boards, made up of representatives from each of the 15 occupational clusters, were established to identify available job information. Community people, including parents and graduates of the schools, participated in a school career day. Individuals were also invited as speakers into a classroom; these business people often provided leads to jobs for some seniors looking for work. Students also gained exposure to work situations through field trips to offices, factories, and businesses. Files were kept on each field trip, listing the place, cost, appropriate student age group, number of students, contact person, and other relevant information.

Building relationships with community clubs and service organizations, such as the Lions Club or the Chamber of Commerce, was mentioned as an important means of developing job contacts and interesting businesses in becoming work stations. When possible, students were encouraged to participate in job sampling experiences. Samplings were set up in business offices or factories for one or two days. Often, the 15 clusters were combined to form fewer clusters and provide students with exposure and experience in jobs in each cluster. Only general information from the Dictionary of Occupational Titles or the Occupational Outlook Handbook was given before the students went to the jobsite. Students later discussed the specifics of their job sampling experiences in class.

Administrators' Perspectives.

Administrators at the first conference defined this category as including both field experiences for students at community facilities and utilization of community resources within the school setting. Specific in-school strategies discussed included monthly "mini-career days" which emphasized demonstrations and the involvement of deaf role models. On a larger scale was use of periodic career days: a full day of activities during which 12-15 community people made presentations and participated in small group, question-and-answer sessions at the school. The benefit of such resources extends beyond career day participation because these people can identify and recruit other community resources or prove to be future employment contacts themselves.

The consensus was that careful, preparatory work with industrial, business, and service resources should take place before any activity

involving students occurs. It is usually helpful to appoint a resource person to establish the general system and make contacts, because many individual teachers are not comfortable initiating interaction with industrial personnel. Such a person can also identify resources related to curricular goals, prevent uncoordinated use or overuse of particular resources, and provide leadership and a "rallying point" for instructors. It was also suggested that community resources be placed on the schools' mailing list in order to foster continued involvement and commitment.

The administrators at the second conference reported a varied and comprehensive list of organizations, people within organizations, individuals, and other resources which had been used to locate jobs for students, provide work experience, and promote the goals of career education. Some of those resources were business and government organizations, such as local Chambers of Commerce, courts, hospitals, unions, and TPAR (a computer listing of 1000 industries, by occupation, which offer field trips). Of special interest to hearing impaired students may be chapters of the Registry of Interpreters for the Deaf and local telecommunications agencies.

Service groups provided resources across a broad range of interest areas. Some of the groups which have been useful were the Lions Clubs (and other social and service groups), arts and crafts clubs, homemakers' and 4-H Clubs, and on-site Vocational Rehabilitation. Vocational Rehabilitation agencies can also conduct work aptitude assessment with HEW funds.

Adult deaf community members and parents have been used as resources in the classroom, while other educational settings have been used to

extend available resources. Local community colleges and schools may offer relevant courses in community education, and State Departments of Education may provide career education specialists and consultants.

Counselors' Perspectives.

Participants at the first conference supported the use of community resources for career education activities. They found business and industry people to be interested in assisting the schools and their students. Business people have held workshops for seniors and have cooperated in the evaluation of some of the school training programs for accuracy and relevancy to the real work scene. The counselors mentioned, as especially important, school visits by groups that may suffer from stereotyping, such as deaf workers or women workers. It was cautioned that bringing in only deaf workers sometimes leads students to believe that only those workers' jobs are appropriate for them. (A note about scheduling such visits: programs were sometimes poorly attended when held after regular school hours.) Off-campus training programs were also cited as an effective use of community resources. However, it may be difficult to coordinate in-class interpreting for deaf students who participate in such programs.

What Have We Learned about Work Experience?

Teachers' Perspectives.

Work experience proved to be a successful undertaking in many career education programs represented at the first conference. This

experience was provided through both real and simulated situations, with students functioning in both paid and volunteer work placements. In one program, five-to-nine-year old students set up a factory in which they "manufactured" products on an assembly line and later sold them in a store. The experience included exposure to such concepts as clocking their work, getting paid, taking a break, and stereotyping (deaf/hearing, male/female) likely to be encountered on the job.

In another program, students and teacher cooperatively produced furniture which was later sold. Many schools encourage supervised on-campus work. For example, secondary school students may work in mail delivery jobs on campus. In order to relate their work activity to career education concepts, students working in the kitchen or snack bar used a chart to record their activities. They documented and later analyzed the skills they had used.

Some secondary students worked off-campus, in restaurants and animal shelters. A summer program (limited to juniors and seniors) with work experience in the community was discussed. This experience was preceded by five or six years of exposure to self-awareness games, using the Career Insights and Self Awareness Gaming program (CISAG), slides about work functions, concepts, and field trips.

Although work experiences have been generally beneficial to the students, some problems continue to arise, particularly in the off-campus work situation. Employers often complain about the work habits of the older students. Students sometimes display depressed learning and attitude when there are no interpreters provided in public vocational schools or work settings. Communication problems are chronic; one

teacher advocated training in manual communication for those who supervise students in community settings. Trained supervisors could then bridge the communication gap in a work placement where regular supervisors cannot sign.

Teachers at the second conference viewed work experience as a valuable and important part of career education. Generally, concerns about work experience centered on establishing work stations or positions in industry and government, motivating students to participate without financial rewards, and finding appropriate role models for students. Many participants reported success with using surplus supplies from businesses and factories to establish work stations in schools. They also used the school's own equipment or facilities to set up work stations. Students worked in cafeterias, central administration offices, and libraries. Some teachers recommended using classwork to build a positive attitude toward work; student contracts were used to establish objectives, due dates, and quality levels which students monitor themselves.

Some problems encountered in providing work experiences were caused by inflexible union regulations and insurance requirements. However, one significant problem centered on the students' attitudes toward work. Many students want to work only when a financial incentive is offered. Many teachers felt that the personal/social aspects of work were not stressed enough and that frequently the interests of each student were not assessed and considered prior to the work placement. In some cases, a student's poor attitude toward work may reflect a lack of understanding of the jobs held by his or her own parents. Some programs sent students

to work with their parents. However, other schools could not use parents for role models or for cooperative work experiences because the parents were on welfare.

Administrators' Perspectives.

Several participants at the first conference recommended better utilization of on-campus opportunities for work experience in preparation for off-campus placement. Emphasis was placed upon simulating work experiences in the classroom and emphasizing school as the "work place" of students. School personnel are potential resources for developing proper work attitudes. One state provided a $30 per month incentive to personnel within the school to learn a second language (in this case, manual communication), thus enabling auxiliary staff -- plumbers, electricians, dieticians -- to describe, explain, and give directions to students. This resource base has expanded the quantity and quality of work experiences provided to the students by the school, particularly for younger students who are normally prohibited from engaging in part-time employment.

Off-campus volunteer positions can allow students to demonstrate responsibility and learn effective work habits. Volunteerism is especially useful in small communities where strong competition exists for a limited number of paid positions. It is important to recommend only the strongest candidates for newly-developed placements (paid or volunteer), in order to maximize positive employer response and the possible creation of other positions. Guidance should also be provided to participating employers on such topics as how to communicate with deaf students.

Off-campus experiences can create problems. Parents may resist such activities, feeling that they detract from "attention to basics"; parental support should be enlisted to overcome such feelings. Parents are also helpful in eliminating transportation problems that impede a work experience program. Among the business community, a "charity only" attitude toward deaf workers may exist. A stong cadre of participating employees and parents can "sell" the benefits of deaf workers to other businesses. Unions should be approached for their assistance in providing exposure to occupations affected by union regulations restricting student work.

About one-half of the schools represented at the second conference had established programs giving work experiences to students. The work experience should be enjoyable and lead to a feeling of success; this attitude can be developed on a daily basis in all classrooms. Most schools avoid adopting the work vs. play attitude. The administrators felt that they had said a great deal about work experience in the preceding discussion. However, they added aspects of a work experience program which they felt were important.

The school's own resources should be considered first. For example, have students work in the cafeteria, service the vending machines, provide janitorial services, help the audiologist and nurse, assist the teacher's aides, and serve as peer tutors for younger students. Lower functioning students can start in "Work Activity Centers" in the school and can establish contracts with local businesses for their work. Work experience programs can begin in the middle school and provide short-term experience on the job sites in each of the 15 clusters. More extensive

summer work programs may be possible using federal and state funds. Recognizing that paid positions are not always plentiful, start with volunteer programs to gain entry into a business or organization. After establishing a good reputation, these programs could lead to paid positions. It was suggested that Vocational Rehabilitation counselors be involved in any or all of these activities.

Unfortunately, there has been an insufficient number of placements for all students to be included in work experience programs. This problem is aggravated by local union rules and libel laws. Union leaders and the CETA program will not do anything for exceptional children in some areas. Another problem to be resolved is whether to offer students course credit or payment for work done. Finally, while work experience was generally considered beneficial, the lack of statistics related to the employability of work-study students was mentioned.

Counselors' Perspectives.

Work experience projects and programs were viewed positively by the counselors at the first conference. Most of the schools are at the experimentation stage with work experience programs, but were able to comment on some positive trends. The business community has been increasingly receptive to deaf student workers. There has been a substantial number of actual placements. Most of the jobs fit into the rough categories of unskilled and clerical, with more skilled jobs depending on the students' abilities and the employers' willingness. This work experience provides an opportunity for personal/social development in addition to its traditional purpose of providing a bridge between school

and the work world. Vocational Rehabilitation and the CETA program have served as potential financial resources for many work experience programs.

Having a full-time person, perhaps in the capacity of Work Experience Coordinator, was viewed by all the participants as important to the success of the program. Preparation programs and counseling assistance are needed during and after the experience. Insufficient supervision can cause an experience to bomb for some students. A negative experience can also result from improper screening of students. Only problem students were sent to the work-study program at one school. It was difficult to place these students.

What Have We Learned about Infusion Compared to Separate Curricula?

Teachers' Perspectives.

The category of infusion raised some of the most serious questions of the day, such as: How should infusion occur? How can teachers develop content goals when they have no background in career development? Who should judge the compatibility or incompatibility of subject matter goals and goals for career education? In general, the teachers' group at the first conference agreed that each teacher should infuse concepts of career education into their instruction. However, without some in-service staff development and school-wide adoption of an integrated plan for infusion, infusion efforts may cause hostility, confusion, and eventual defeat of the program. Some schools found that isolated units on career education were rejected by teachers, and yet, individual teachers did not have the time or competence to develop units on their

own. It was recommended that a coordinator could show where career education concepts and activities could be infused into the curriculum, with a workshop for teachers to chart the infusion. Together, teachers themselves could decide where to use existing materials and units.

Participants in the teachers' group at the second conference did not favor one method over the other. Concerns about both infusion of career education and career education as a separate curriculum were raised. Many teachers favored a combination of the two approaches. The majority of teachers felt that they were teachers of specific subjects (e.g., math, science) and that the infusion method demanded they teach career education rather than their subject area. Career education in the classroom can too easily become a "time-filler"; then, some important objectives are not taught or are taught haphazardly. Materials development was also cited as a problem because materials which infuse career education are simply not available. One school established their career education goals and then correlated these goals with the materials being used. Other programs involved the teachers to a greater extent by asking them to write the teaching guides. Many teachers already incorporate career education into their instruction without realizing they do. On the other hand, separate career education classes had problems, too. Teachers could not "get to know their students" in these classes. Both methods have strengths and weaknesses.

Administrators' Perspectives.

At the first working conference, this subject prompted spirited debate and conflicting reports of approaches and results. One participant

described the infusion approach as "d-m difficult;" another typified the separate curriculum approach as a "double-edged sword" with both positive and negative results.

Elementary teachers seem to respond better to the infusion concept, perhaps because infusion is more easily accomplished within a self-contained classroom. A separate curriculum was found easier to implement at the junior high and high school levels, with the separate disciplines and rotational class schedule typical at this level. However, a separate curriculum approach may result in teachers feeling that career education is someone else's responsibility or in teachers limiting their individual attention to developing units on occupations within their discipline. A solution might be to include career education objectives within the Individualized Educational Program (as outlined in P.L. 94-142). One school reported success in making content discipline committees responsible for building generalized topics -- career education, consumer education, life skills--into their specific curriculum area.

From the perspective of efficiency, a separate career education curriculum, combined with a person identified as a career education specialist or coordinator, would focus necessary attention on the subject matter and would probably result in faster completion of initial products and visibility for the career education effort. One principal warned that faculty may be able to assimilate and implement only one comprehensive curriculum development effort in one year. Priorities would need to be established, for example, among a reading program, an interpersonal/social skills emphasis, and a career education program.

Many of the schools represented at the second conference had adopted the infusion method of career education. Only a few schools used career education as a separate curriculum area. Five or six schools used both approaches. Most administrators agreed that infusion was the best approach, but teachers were not prepared for infusion by their pre-service programs or by in-service training programs. Having good interpersonal skills was seen as important if teachers are to be successful with the infusion process. Using the infusion method, it is hard to be sure that career education "happens," especially in high school, where there are no self-contained classrooms. In addition, teachers often lack needed materials for infusion, or they feel unqualified to teach about unfamiliar jobs. While infusion is generally seen as easiest to accomplish in the elementary grades, reservations were expressed concerning early promotion of careers (parents oppose it); we should be careful not to inadvertently lead children to make decisions about careers before they have all the options presented to them.

Both infusion and separate curricula were viewed as necessary. Infusion helps the students to assimilate the idea, while add-on curricula force the student to focus on career education and to be aware of the topic. Some people strongly disagreed with calling this add-on course "career education." They maintained that career education was a philosophy or concept, not a content area. There was a suggestion to call such a course "career guidance."

Counselors Perspectives.

Counselors at the first conference were supportive of infusion of career education in the classroom. They noted, however, that infusion was strongly resisted by long-term people, while newer staff were more amenable to infusion attempts. Suggestions were made as to how school staffs could be assisted in infusion attempts, especially in situations of transition from a separate career education curriculum. Notable among these was one school's participation in a "staff development day," during which teachers brainstormed infusion strategies and printed the results in a pamphlet that became a teacher resource.

What Have We Learned about Developing Career Education Materials vs. Commercially Available Materials

Teachers' Perspectives.

Developing materials locally at the classroom level generally proved to be an unsuccessful effort for the schools at the first conference. Most development which was successfully implemented was accomplished systematically with professional developers teaming with teachers and media producers. Adaptation of materials designed for hearing students has also proved problematic, since the outside developer may have little sensitivity to the language problems and limits on abstraction frequently experienced with deaf learners. Teachers need time and training to be able to make the needed revisions and plan for the proper use of the materials. There were some disparaging comments regarding exploitation of a new market of handicapped students, but outside development has

also produced some significant career education materials specifically designed for the career development of deaf students. Notable among these are the CREED materials from the University of Rochester, Rochester, New York, and Is Science a Possible Career for You? from Research for Better Schools in Philadelphia. It was strongly felt wasteful of a teacher's time to have to develop materials and strategies when outside developers may have more expertise. One additional suggestion: Teachers need to each have their own packet or set of materials. If they have to share materials without a supervisor to function as librarian, there may be hoarding or loss problems.

Some teachers at the second conference felt that no materials are "100% what you want" and it is often better to develop your own. However, others felt they could and would use materials produced by others. They would refine these materials themselves to meet their own particular needs. Most teachers supported the combination of self-developed materials (especially for infusion) and materials developed by others. Teachers recommended that a centralized clearinghouse for career education materials and programs for the deaf be established. The recommendation was made that schools or agencies which develop materials limit their field testing of these materials and share them with others in a more timely and efficient manner, even in "rough" form, since they will be adapted by teachers anyway.

Administrators' Perspectives.

The group at the first conference agreed that there was a psychological value in involving school staff in developing materials because

such involvement seems to promote commitment and actual use. Full development often takes no more time than adapting commercial materials for the special needs of the deaf. Participants stressed, however, that development requires time and expertise and should not be considered a spare-time activity. The importance of a career education specialist within the school was emphasized, regardless of the materials used. Such an individual should be extremely familiar with available resources so that these materials can be recommended and publicized to teachers. These activities can help combat all-too-typical behavior patterns which exist with respect to commercial materials, i.e., that their use is limited to those teachers involved in the original purchase decision and/or they fall into disuse with faculty turnover. Divergent opinions were expressed concerning the need for Career Education Curriculum Guides for teachers. Some participants felt such guides would be self-defeating if the goal was to infuse career education concepts into existing curriculum guides. Others felt guides were needed to explain the conceptual/theoretical base and to teach specific content such as a classification system or job functions. Guides may help teachers feel secure about the subject matter and expectations placed upon them.

Administrators at the second conference reported that both commercial and teacher-developed materials were being used. There is a great need to share information and materials with other schools in order to prevent "re-invention of the wheel." A national clearinghouse for distribution of materials was suggested as a solution. There seemed to be many problems with commercially prepared materials. There are more materials available for elementary school students than for high school

students; no commercial packages seem suitable for older students. Most of the commercially developed materials are not suitable for deaf students and there is not enough emphasis on the personal/social skills needed to hold jobs; more emphasis is on the job skills themselves. For the most part, teachers have had to adapt materials. The greatest problem with development of programs and materials was agreed to be time. Specific development projects mentioned included the following: CREED, Project Discovery, Forms in Your Future, instruments by VALPAR and Singer, textbooks for each of the 15 clusters, curriculum guides, a bibliography from the American Vocational Association on career education, rewritten scripts of filmstrips, and a guide for occupational titles for the deaf.

Counselors' Perspectives.

Various points of view were expressed by counselors at the first conference regarding the relative desirability of career education materials developed internally and externally. Some participants felt that materials would have more potential for success if teachers were involved in making them. Time is certainly an important factor in deciding the extent of this involvement, but it must be recognized that even using externally developed materials will probably involve considerable time, if only for language adaptation. It was suggested that schools try modifying material before they scrap them in favor of new purchases.

Several schools said they had career information centers which were useful. The use of computers in career development was discussed; some schools have computerized occupational information banks. One school

wants to create a print-out capability with the TTY. Other schools are experimenting with computerized guidance systems of varying complexity.

What Have We Learned about Preparing Teachers, Counselors and Administrators?

Teachers' Perspectives.

Divergent opinions were expressed at the first conference about the preparation of teachers, counselors, and administrators. So little is taught about careers and career education in teacher preparation programs that teachers feel insecure with the unfamiliar content.

In-service training which teaches philosophy was viewed as unmotivating. Teachers want to hear specific suggestions and see materials which are ready to use. Some teachers expressed a feeling of discomfort even after participating in practical workshops and using materials. If teachers knew what materials were cheapest, easiest to use, and what had worked best for other teachers, they would use it themselves. The question of whether only volunteer teachers should be provided with the in-service workshop revealed differing opinions. Volunteers may do a better job, but all teachers should be involved, at least in understanding the concepts; all should be aware of the total program goals. This focus can be effectively communicated in an in-service program.

Teachers at the second conference felt that the training of new teachers in career education should become a requirement for student teaching and certification. People currently teaching students should

have opportunities to get into the world of work, attend career education workshops and in-service training courses, and be informed of the jobs and careers of their school's graduates. Specific training might include a staff development day, aimed at career awareness and explanation; newsletters used to inform teachers and parents about the jobs of the school's graduates; and in-service training workshops. However, these workshops should not be conducted after a regular school day. The training should be offered during the summer break, on weekends, or during an in-service day. Teachers should receive additional pay, if possible. Training should be completed before teachers are expected to implement programs in the classroom.

Administrators' Perspectives.

Administrators at the first conference emphasized the importance of training administrators in order to insure adequate support to teachers and adequate coordination of the career education effort. One school assigned career education responsibilities to the curriculum coordinator to foster infusion and attention to in-service training. Two other schools depended on instructional supervisors for general curriculum and career education curriculum development. All the schools alluded to inherent weaknesses in these assignments, in that emphasis was dependent on the personal biases of the individuals. No one person, admittedly, can be expert in all content areas; each individual, depending on his or her background and personal interest, might advocate speech, human sexuality, or career education.

Group consensus suggested that in-service training programs would be most effective if conducted over an extended time frame (i.e., one two-hour workshop will not suffice) and if followed up by the continued support services of a specialist who can work individually with teachers. One school which experimented with a one-hour per week training program extending throughout the school year replaced it with an extensive, one-week summer session in order to improve retention. Other alternatives suggested were a national corps of itinerant in-service trainers, who could service several schools within a region and massive reform of teacher training programs through certifying boards. Also, whenever possible, in-service training programs should seek involvement of parents, dormitory staff, and other personnel in addition to teachers.

Few schools represented at the second conference had developed in-service training programs to prepare teachers for career education. All agreed that there was a need for better pre-service and in-service training, but time was the big drawback. Teachers have no time to plan for career education; time needs to be set aside for teachers to meet and plan. Teacher's unions were seen as an obstacle preventing more time for in-service training, due to a limited number of professional days. It was felt that day schools had more problems with this time factor than residential schools. Specific suggestions for the format of in-service training included teachers in-servicing parents, peer in-servicing by an in-house advisory team, inclusion of formal career education training in college education programs, and performance contracting, which included incentives for successful development and implementation of career education materials.

Counselors' Perspectives.

During a limited period of discussion, individual participants commented that teacher training programs should include career education. In addition, staff development workshops where teachers brainstormed strategies and reviewed materials were suggested, along with use of community volunteers in development efforts. The point was made that administrators need to realize that major career education efforts may necessitate staff increases.

What Have We Learned about Facilitating Continuity Within Transition between Lower, Middle, and Upper Schools?

Teachers' Perspectives.

At the first conference, the category of continuity was favorably reported upon by experienced schools which have a career education master plan. Some states have performance objectives for career education for all educational institutions, which could serve as the basis for continuity. The most successful continuity occurs in the elementary grades, where teachers have good communication among themselves and where self-awareness is highlighted. When this continuity does not occur, programs suffer from lack of coordination. Students are exposed repeatedly to activities as each teacher selects a favorite strategy or piece of media to "infuse" career education. A clever solution to this problem was offered by one participant whose school uses profile cards to monitor the career education activities to which each student has been exposed.

The idea of continuity from kindergarten through high school and beyond was favored by teachers at the second conference. Team teaching has been used effectively in some programs to promote continuity. Most teachers felt that continuity would not be difficult to establish if there were greater communication and agreement on goals among involved participants. There is especially a need for better communication between teachers of academic subjects and teachers of vocational education.

Administrators' Perspectives.

Participants at the first conference agreed that transitions between various levels within the same school system, among "feeder" schools into different junior high and high school districts, and between vocational and academic tracks within the same school is a difficult problem. One school promoted informal, information-sharing sessions for practitioners from various levels to break down isolation. Group consensus suggested that more fundamental issues of objectives, roles, and general implementation plans must be resolved before the problem of fostering continuity could be attacked.

A few administrators at the second conference responded to this question, but most felt that they had exhausted the topic. A few suggestions were offered, but the consensus seemed to be that the task of getting a program started in each school was a top priority. However, it was suggested that there must be some closure to career education programs in high school; it is important to avoid overlap between programs. The student's permanent records may be used to insure continuity with the student's particular career education and work experience and

to ensure that his or her experience is not duplicated. Full-time education coordinators should be employed in districts and in schools; few schools have them, but deaf education programs seem to be in the forefront on this issue. One school developed its middle school plan, and then spiraled up to high school and down to its elementary school with the same general plan.

Counselors' Perspectives.

Participants at the first conference saw the need for continuity in the career education program at different grade levels, and several examples were cited in which an elementary through high school approach was operative. In one case, a career education curriculum was being written encompassing all levels and incorporating a specialist to help teachers. A discussion ensued on the topic of the academic vs. vocational programs in schools, specifically the problems that arise when the two programs are viewed as separate and unrelated. Several participants said that all their students took vocational courses in addition to academic ones, but the group was still left with the problem of how to reconcile academic and vocational approaches in practice when the concept of career education embraces both.

III. IDENTIFYING THE MOST IMPORTANT AND URGENT ISSUES

Process

The fourth objective for the working conferences focused on the need to specify issues involved in career development of the hearing impaired. A modified Delphi technique* was used to identify issues and bring the group to consensus on the "most important" and "most urgent" issues.

Prior to the first conference, participants were sent a letter asking them to list five issues or problems which they felt must be resolved in order for career education of hearing impaired individuals to be more successful. The responses were combined by the facilitators into the following list of 22 issues and subtopics, which was shared with all participants at the conference:

1. Better definition of career education
    a. Be more comprehensive
    b. Make explicit the relationship of career education and vocation education training
2. Educate public about employability of the deaf
    a. Eliminate stereotypes
    b. Include educators as well as employees
    c. Be realistic

* a consensus-reaching technique typically carried out in paper-pencil format by mailing a list of issues to respondents. The results are collated and sent back to the respondents for further consideration of their responses in view of those of others. In this meeting the technique was implemented face-to-face.

3. Development of appropriate career education materials

   a. Control language and complexity levels

   b. Delineate appropriate occupations

   c. Include resume writing, job seeking

   d. Design materials appropriate for infusion into regular classroom

   e. Include student input

4. Proper balance of career education with remaining curricula

   a. Do not forget basic skills and humanities education in offering career education

   b. Is career education a passing fad?

   c. Where should career education attention be focused first?

5. Increase volume and availability of employment outlook studies

6. Career education needs to continue after graduation

   a. Retraining or upgrading skills

   b. Increasing the job mobility of the hearing impaired worker.

7. Parents and families need to be more involved in career education process; increase communication between schools and parents

8. Include personal/social and job adjustment education; for example, education concerning the importance of being on time, productivity, minimizing unnecessary absences

9. Dissemination of successful programs and models

   a. Delineate responsibilities of career education personnel

   b. Share successful curricula

10. Lack of funding
    a. Need seed money for piloting programs
    b. Increase knowledge of funding sources and agencies
11. In-service training for staff
    a. Organize conferences and workshops
    b. Develop and disseminate materials for in-school training
12. Better use of community people and resources
    a. Schedule in-class presentations
    b. Incorporate field trips into the curriculum, even at younger age levels
    c. Make use of other resources: libraries, employment agencies
13. Greater visibility of good deaf role models
14. More administrative commitment, in terms of
    a. Budget
    b. Personnel responsible for implementing career education programs
    c. Materials
15. Expand work/experience (co-op) programs
    a. Increase frequency
    b. Begin earlier
    c. Coordinate with in-school learning
16. Infuse career education into regular classrooms, dorms
    a. Convince classroom teachers and other staff of the importance of infusion
    b. Recognize that limited time and already overburdened teachers are two real obstacles
    c. Is infusion really a good thing?

17. Include career education in teacher-of-the-deaf preparation programs

18. Begin career education earlier and continue throughout schooling

19. Establish clearinghouse for career education of the deaf

    a. Disseminate information

    b. Conduct workshops and conferences

    c. Do research

20. Need job placement and counseling services after graduation

21. Evaluation of success of career education programs

    a. Determine the impact on eventual job placement and success

    b. Assess the effect on students' immediate knowledge and behavior

22. Better career guidance and counseling

    a. Assess aptitudes and skills (for individual counseling)

    b. Include education about risktaking, values, interests, etc.

    c. Remain flexible enough to meet students' needs

    d. Convey to students the concept that a career is more than just your next job

The same grouping of participants by the separate role-alike groups that identified "What We Have Learned" was used to establish the groups for discussing priorities. The next step involved discussing these issues to ensure that participants had a common understanding of the meaning of each issue. Following such clarification, participants were asked to add any issues which they felt were not included in the above list. Two additional issues were added at the first conference:

23. Better correlation between secondary and elementary schools
24. Development of a comprehensive plan for implementing the career education goals of a school.

Participants in each group were then asked to select the five issues which they considered to be most important. The total number of votes received by each issue was posted on large sheets of newsprint for participants to view.

A discussion allowed participants to either present arguments in support of the number of votes given to a particular issue or to put forth a rationale for urging the group to raise or lower the importance of that issue. Following this discussion, participants were asked to individually rate the relative importance of each of the issues, using the following scale:

1 - of no importance
2 - of minor importance
3 - of moderate importance
4 - of major importance
5 - of critical importance

Results

First Conference:

The results of the ratings for each of the individual groups and for the combined groups are displayed in Table 1.

In-service Training, number 11, received the highest overall rating. It was rated the highest by counselors and second highest by both teachers and administrators. Infusion, number 16, was ranked fifth by teachers, second by administrators, and tied for first with in-service training by counselors. It was rated second when the group ratings were combined. The third highest item in the combined ratings was number 24: the need for comprehensive plans for implementing career education. It is particularly interesting to note that teachers and administrators rated this issue extremely high (4.8 and 4.9, respectively), while counselors considered it of moderate importance, as reflected by their rating of 3.2. Other areas considered to be of major importance were numbers 18, 12, 3, 7 and 15. Considered of least importance was number 1: the need for a better definition of career education. This issue was assigned a combined rating of 2.3. This is consistent with observations made in the section, "What We Have Learned." In that section, emphasis was placed on the need for more information and guidance concerning the "how to do it" aspects of career education, with less emphasis on conceptual aspects. The one issue in which ratings reflected major disagreement among the three groups was number 19: the need for a clearinghouse for career education materials. Counselors considered this issue of major importance, while teachers thought it of minor importance, and administrators rated it virtually worthless, although they had discussed the concept of a clearinghouse positively in the earlier discussion on what we have learned about developing materials.

TABLE 1

Ratings of Importance: First Conference

(Using a 5-point scale with 5 being of critical importance and 1 being of no importance)

Issue	Combined	Teachers	Admin.	Counselors
1) Better definition of career education	2.3	2.4	2.9	1.7
2) Educate public about employability of the deaf	4.3	4.7	4.2	4.1
3) Development of appropriate career education materials	4.0	4.4	4.1	3.6
4) Proper balance of career education with remaining curricula	3.2	3.2	3.4	2.9
5) Increase volume and availability of employment outlook studies	2.9	3.0	2.6	3.1
6) Career education needs to continue after graduation	2.8	2.7	2.6	3.2
7) Parents and families need to be more involved in career education process	4.0	3.9	4.1	4.1
8) Include personal/social, job adjustment education	4.0	4.0	3.7	4.2
9) Dissemination of successful programs and models	3.7	3.7	3.8	3.6
10) Lack of funding	3.1	2.9	3.3	3.1
11) In-service training for staff	4.6	4.6	4.7	4.5
12) Better use of community people and resources	4.1	4.0	4.3	3.9
13) Greater visibility of good deaf role models	3.8	3.9	3.4	4.1

TABLE 1
(Continued)

Issue	Combined	Teachers	Admin.	Counselors
14) More administrative commitment	3.9	3.1	4.6	4.1
15) Expand work/experience (co-op) programs	4.0	4.0	3.9	4.0
16) Infuse career education into regular classrooms, dorms	4.4	4.0	4.6	4.5
17) Include career education in teacher-of-the-deaf preparation programs	3.5	2.8	3.9	3.7
18) Begin career education earlier and continue throughout schooling	4.3	4.2	4.2	4.4
19) Establish clearinghouse for career education of the deaf	3.2	2.3	0	4.0
20) Need job placement and counseling services after graduation	3.1	2.9	3.2	3.1
21) Evaluation of success of career education programs	3.2	3.1	2.7	3.9
22) Better career guidance and counseling	3.7	3.6	3.6	4.0
23) Better correlation between secondary and elementary schools	3.4	3.1	3.7	3.3
24) Comprehensive plan for implementing education goals	4.3	4.8	4.9	3.2

The final step in identifying priority issues was to determine those issues most urgently in need of attention, after having considered an aggregate of factors, such as: How important is the issue? How great is the disparity between where we would like to be on an issue and where we are now? What would be the cost of addressing the issue? What is our probability of success? Whose responsibility is it? How is the issue related to other issues? After considering these factors, participants were asked to select the four issues which they felt were in most urgent need of attention. The number of "urgency votes" were tallied and the results are displayed in Table 2. To assist us in interpreting the data, the issues have been re-listed (rank ordered) in Table 3 according to the total number of votes they were assigned in the combined ranking of urgency. The number of urgency votes given each issue by the respective groups is also displayed.

The issue considered to be most urgently in need of attention was number 24: the need for schools to develop comprehensive plans for the implementation of career education. Interestingly enough, counselors considered this to be of moderate importance in the overall scheme of things, despite the fact that they felt it was in urgent need of attention. Teachers and administrators certainly concurred that this issue needs urgent attention. In the administrators' group, emphasis was placed on the need for assistance to schools in developing a comprehensive plan,

TABLE 2

Urgency Votes For Each Issue: First Conference

Issue	Combined Votes	Teacher Votes	Admin. Votes	Counselor Votes
1) Better definition of career education	2	2	0	0
2) Educate public about employ-ability of the deaf	9	7	0	2
3) Development of appropriate career education materials	15	7	8	0
4) Proper balance of career education with remaining curricula	2	1	1	0
5) Increase volume and avail-ability of employment outlook studies	1	1	0	0
6) Career education needs to continue after graduation	1	1	0	0
7) Parents and families need to be more involved in career education process	3	0	2	1
8) Include personal/social job adjustment education	11	5	1	5
9) Dissemination of successful programs and models	6	0	1	5
10) Lack of funding	1	1	0	0
11) In-service training for staff	31	14	8	9
12) Better use of community people and resources	9	2	7	0
13) Greater visibility of good deaf role models	3	2	0	1
14) More administrative commitment	14	0	7	7

TABLE 2
(Continued)

Issue	Combined Votes	Teacher Votes	Admin. Votes	Counselor Votes
15) Expand work/experience (co-op) programs	1	0	0	1
16) Infuse career education into regular classrooms, dorms	25	7	13	5
17) Include career education in teacher-of-the-deaf preparation programs	2	0	1	1
18) Begin career education earlier and continue throughout schooling	9	3	2	4
19) Establish clearinghouse for career education of the deaf	0	0	0	0
20) New job placement and counseling services after graduation	1	0	0	1
21) Evaluation of success of career education programs	0	0	0	0
22) Better career guidance and counseling	2	1	0	1
23) Better correlation between secondary and elementary schools	0	0	0	0
24) Comprehensive plan for implementing career education goals	37	12	16	9

TABLE 3

Rank Order	Issue (number)	Combined Vote	Teacher Vote	Admin. Vote	Counselor Vote
1	Comprehensive plan for implementing career education goals (24)	37	12	16	9
2	In-service training for staff (11)	31	14	8	9
3	Infuse career education into regular classrooms, dorms (16)	25	7	13	5
4	Development of appropriate career education materials (3)	15	7	8	0
5	More administrative commitment (14)	14	0	7	7
6	Include personal/ social job adjustment education (8)	11	5	1	5
8	Begin career education earlier and continue throughout schooling (18)	9	3	2	4
8	Educate public about employability of the deaf (2)	9	7	0	2
8	Better use of community people and resources (12)	9	2	7	0
10	Dissemination of successful programs and models (19)	6	0	1	5
11.5	Greater visibility of deaf role models (13)	3	2	0	1

TABLE 3
(Continued)

Rank Order	Issue (number)	Combined Vote	Teacher Vote	Admin. Vote	Counselor Vote
11.5	Parents and families need to be more involved in career education process (7)	3	0	2	1
14.5	Better definition of career education (1)	2	2	0	0
14.5	Proper balance of career education with remaining curricula (4)	2	1	1	0
14.5	Include career education in teacher-of-the-deaf preparation programs (17)	2	0	1	1
14.5	Better career guidance and counseling (22)	2	1	0	1
19	Need job placement and counseling services after graduation (20)	1	0	0	1
19	Increase volume and availability of employment outlook studies (5)	1	1	0	0
19	Career education needs to continue after graduation (6)	1	1	0	0
19	Lack of funding (10)	1	1	0	0
19	Expand work/experience (co-op) programs (15)	1	0	0	1
23	Establish clearinghouse for career education of the deaf (19)	0	0	0	0

TABLE 3
(Continued)

Rank Order	Issue (number)	Combined Vote	Teacher Vote	Admin. Vote	Counselor Vote
23	Evaluation of success of career education programs (21)	0	0	0	0
23	Better correlation between secondary and elementary schools (23)	0	0	0	0

with several administrators expressing uncertainty as to how to proceed with developing such a plan. It is important to remember that this group of administrators represented, for the most part, schools with some experience in career education. Such a declaration becomes even more significant when one considers that the majority of schools are without any knowledge of or experience with career education.

The second most urgent issue was the need for in-service training for staff, number 11, and the third was the infusion of career education throughout the educational environment, number 16. Beyond this point, the urgency of issues differs significantly as a function of the groups. For example, teachers and administrators considered the development of materials as quite an urgent issue. Counselors considered more administrative commitment to be an urgent matter, while teachers did not. In interpreting this latter point, it is important to point out that of the administrators present only one was the chief executive officer for the school, despite the fact that presence of the top administrator was requested. Teachers may very well be feeling the "commitment" from administrators to implement career education and may desire some assistance in accomplishing this implementation before receiving any more "commitment." Further speculation at this time in interpreting the results would not be productive. What is important is the clear request for in-service training for administrators in how to develop a comprehensive career education plan, and for staff in how to carry out such a plan.

Second Conference:

The same list of 24 issues which were identified and voted on in the first working conference were sent to the participants three weeks prior to the second working conference. They were asked to respond by adding to the list or by clarifying those issues which were already listed, by adding components unique to their school or community situation. As a result of this additional input, a twenty-fifth issue was added:

25. Improved coordination and work with vocational rehabilitation agencies.

During the course of the discussion at the second working conference, prior to voting on the issues, another issue was identified and added to the list:

26. Develop appropriate communication skills to increase employability and functioning in the community.

The process used to identify the most important and urgent issues was identical to that used in the first working conference. The modified Delphi technique used with three role-alike groups (teachers, administrators and counselors) helped bring the highly rated and top ranked issues into focus. Following discussion, participants were asked to rate each

issue individually for importance using the same 1 - 5 scale used in the first working conference.

1 - of no importance

2 - of minor importance

3 - of moderate importance

4 - of major importance

5 - of critical importance

The results of the ratings for each of the individual groups and for the combined groups are displayed in Table 4.

Issue number 8, Include Personal/Social, Job Adjustment Education, was rated of crucial importance by teachers and administrators and highly to crucially important by counselors. In-service Training, issue number 11, was second highest in importance, although teachers and counselors rated it somewhat lower than did administrators. Ratings of the Need for a Comprehensive Plan, number 24, and Begin Career Education Earlier and Continue Through Schooling, number 18, seem to dovetail for third place in importance, with teacher ratings highest on number 18 and administrator ratings highest on the need for planning. Considered of least importance were numbers 1 and 6, Better Definition of Career Education and Career Education Needs to Continue After Graduation. This vote may be explained by the sophistication which was exhibited in the small group discussion on "What We Have Learned." The participants have been involved in career education long enough to know its delineation and are aware of the practical limits of a school program.

TABLE 4

Ratings of Importance: Second Conference

(Using a 5-point scale, with 5 being of critical importance and 1 being of no importance)

Issue	Combined	Teachers	Admin.	Counselors
1) Better definition of career education	2.3	2.1	2.5	2.2
2) Educate public about employability of the deaf	4.1	4.6	4.0	3.8
3) Development of appropriate career education materials	3.8	3.5	4.3	3.6
4) Proper balance of career education with remaining curricula	3.1	3.3	3.1	3.0
5) Increase volume and availability of employment outlook studies	2.5	2.3	2.4	2.8
6) Career education needs to continue after graduation	3.4	3.4	3.3	3.4
7) Parents and families need to be more involved in career education process	4.1	4.4	3.5	4.4
8) Include personal/social, job adjustment	4.9	5.0	5.0	4.7
9) Dissemination of successful programs, models and materials	3.7	3.9	4.3	3.0
10) Lack of funding	3.3	3.3	3.3	3.2
11) In-service training for staff	4.4	4.2	4.7	4.3
12) Better use of community people and resources	4.0	4.1	4.1	3.8
13) Greater visibility of good deaf role models	3.6	3.7	3.2	3.9

TABLE 4
(Continued)

Issue	Combined	Teachers	Admin.	Counselors
14) More administrative commitment	4.0	3.7	4.1	4.3
15) Expand work/experience (co-op) programs	3.7	3.7	3.7	3.6
16) Infuse career education into regular classrooms, dorms	4.1	4.2	4.2	3.9
17) Include career education in teacher-of-the-deaf preparation	3.9	3.8	4.2	3.7
18) Begin career education earlier and continue throughout schooling	4.3	4.8	4.0	4.1
19) Establish clearing house for career education of the deaf	3.5	3.3	4.3	2.8
20) Need job placement and counseling services after graduation	3.8	3.9	3.7	3.7
21) Evaluation of success of career education programs	3.6	3.5	3.7	3.6
22) Btter career guidance and counseling	3.8	3.6	4.2	3.7
23) Better correlation between secondary and elementary schools	3.4	3.7	3.0	3.5
24) Development of a comprehensive plan for implementting career education goals	4.2	3.9	4.5	4.2
25) Improved coordination and work with vocational rehabilitation agencies	3.7	3.8	3.7	3.6
26) Develop appropriate communication skills to increase employability and functioning in the community	3.2	1.8	4.6	3.1

The only discrepant rating occurred with number 26, Develop Appropriate Communication Skills to Increase Employability and Functioning in the Community, which showed a critically high rating by administrators, a moderate rating by counselors and a less than minor rating by teachers. In the follow-up discussion, the leader of the teachers' group explained that the item had been subsumed under personal/social, job adjustment education when the group had discussed it. An informal re-rating showed the teachers' rating to be between a 4 and 5, or highly important.

The final step was determination of greatest urgency for the individual issues. The same criteria for defining urgency were established as for the first working conference. Participants were instructed to select and label the four issues from the list of 26 which they felt were in most urgent need of attention. The tally of urgency votes for each issue is displayed in Table 5.

The issues are displayed in the resulting rank order according to the total number of votes they received in the urgency selection. Table 6 shows the priority of each issue on the basis of being in urgent need of attention, according to the combined vote of all three role-alike groups.

The issue considered to be in most urgent need of action was number 11: In-Service Training for Staff. Counselors rated it top urgency, while teachers and administrators rated it a high second. This compares favorably with the ratings of importance given this issue by all three groups.

TABLE 5

Urgency Votes For Each Issue: Second Conference

Issue	Combined Votes	Teacher Votes	Admin. Votes	Counselor Votes
1) Better definition of career education	0	0	0	0
2) Educate public about employability of the deaf	5	5	0	0
3) Development of appropriate career education materials	10	2	4	4
4) Proper balance of career education with remaining curricula	3	1	1	1
5) Increase volume and availability of employment outlook studies	2	0	0	2
6) Career education needs to continue after graduation	0	0	0	0
7) Parents and families need to be more involved in career education process	16	4	0	12
8) Include personal/social, job adjustment education	38	16	15	7
9) Dissemination of successful programs, models and materials	7	1	6	0
10) Lack of funding	1	0	1	0
11) In-service training for staff	41	12	14	15
12) Better use of community people and resources	5	3	1	1
13) Greater visibility of good deaf role models	1	0	0	1

TABLE 5
(Continued)

Issue	Combined Votes	Teacher Votes	Admin. Votes	Counselor Votes
14) More administrative commitment	7	1	0	6
15) Expand work/experience (co-op) programs	5	2	1	2
16) Infuse career education into regular classrooms, dorms	8	5	1	2
17) Include career education in teacher-of-the-deaf preparation programs	2	0	2	0
18) Begin career education earlier and continue throughout schooling	15	12	0	3
19) Establish clearing house for career education of the deaf	5	0	5	0
20) Need job placement and counseling services after graduation	1	0	0	1
21) Evaluation of success of career education programs	6	2	2	2
22) Better career guidance and counseling	1	1	0	0
23) Better correlation between secondary and elementary schools	2	1	0	1
24) Comprehensive plan for implementing career education goals	29	9	12	8
25) Improved coordination and work with vocational rehabilitation agencies	0	0	0	0
26) Develop appropriate communication skills to increase employability and functioning in the community	10	0	10	0

TABLE 6

Ranking of Issues By Urgency: Second Conference

Rank Order	Issue (number)	Combined Vote	Teacher Vote	Admin. Vote	Counselor Vote
1	In-service training for staff (11)	41	12	14	15
2	Include personal/social, job adjustment education (8)	38	16	15	7
3	Comprehensive plan (24) for implementing career education goals	29	9	12	8
4	Parents and families need to be more involved in career education process	16	4	0	12
5	Begin career education earlier and continue throughout schooling (18)	15	12	0	3
6.5	Development of appropriate career education materials (3)	10	2	4	4
6.5	Develop appropriate communication skills to increase employability and functioning in the community (26)	10	0	10	0
8	Infuse career education into regular classrooms, dorms, etc. (16)	8	5	1	2
9.5	More administrative commitment (14)	7	1	0	6
9.5	Dissemination of successful programs and models (9)	7	1	6	0
11	Evaluation of success of career education programs (21)	6	2	2	2
13.5	Educate public about employability of the deaf (2)	5	5	0	0

TABLE 6
(Continued)

Rank Order	Issue (number)	Combined Vote	Teacher Vote	Admin. Vote	Counselor Vote
13.5	Better use of community people and resources (12)	5	3	1	1
13.5	Expand work/experience (co-op) programs (15)	5	2	1	2
13.5	Establish clearing house for career education of the deaf (19)	5	0	5	0
16	Proper balance of career education with remaining curricula (4)	3	1	1	1
18	Increase volume and availability of employment outlook studies (5)	2	0	0	2
18	Include career education in teacher-of-the-deaf preparation programs (17)	2	0	2	0
18	Better correlation between secondary and elementary schools (23)	2	1	0	1
21.5	Lack of funding (10)	1	0	1	0
21.5	Greater visibility of good deaf role models (13)	1	0	0	1
21.5	Need job placement and counseling services after graduation (20)	1	0	0	1
21.5	Better career guidance and counseling (22)	1	1	0	0
25	Better definition of career education (1)	0	0	0	0
25	Career education needs to continue after graduation (6)	0	0	0	0
25	Improved coordination and work with vocational rehabilitation agencies (25)		0	0	0

The second most urgent issue was number 8: Include Personal/Social Education. This was again the most highly rated issue in terms of importance. Participants in the first conference did not view the need for action on this issue as so highly urgent. A possible explanation may be based on the differences in the two audiences: residential school staff at the first conference, and day and mainstreamed programs at the second conference. It may be that behaviors of the deaf student in a group of normally-hearing peers may stand out as in more urgent need of adjustment. Most counselors, interestingly enough, did not rate this issue as urgent as the Involvement of Parents and Family in the Career Education Process. This issue, number 7, had the greatest discrepancy among the three groups, with administrators giving it no urgency votes, teachers giving it 4 votes and, counselors giving it 12 urgency votes. Closely behind number 7 is number 18: Begin Career Education Earlier and Continue Throughout Schooling. It is important to note that it was the high vote of teachers that carried this issue into the fourth place for urgency. The composition of the participant team from each school included, in most cases, an elementary teacher. Thus, their potential involvement in the career education program efforts seems to be a strong one, and one they are willing to assume.

IV. CONCLUSIONS AND IMPLICATIONS

Where do we go from here? In order to address the fifth objective, it is appropriate to examine the combined results of the two national working conferences. Recall that participants from the first working conference rated 24 specific issues for importance on a 1-5 scale, 5 being critically important and 1 being of no importance. Those participants attending the second conference rated the same 24 issues plus two additional issues which were identified and added during the discussion. Participants were next asked to select the issues they regarded as the most urgently in need of attention.

The averaged importance ratings for the issues as reported by the three groups at both conferences are displayed in Table 7. The issues are listed by rank order in terms of urgency for the two conferences.

It is interesting to note that the results of the urgency ranking for each conference are reasonably similar. The need for in-service training and a comprehensive plan for implementation was highly urgent for both residential school personnel and those from day programs. An interesting discrepancy between the urgency ranking exists for issue number 7, involvement of parents. A logical explanation for less concern over this item on the part of residential programs is the wide territory covered by the state residential programs, and the distance factor which prevents or severely limits the effective involvement of parents.

TABLE 7

Rank Order of Urgency and Average Ratings of Importance for Top Ten Issues Related to Implementing Career Education

Issue Number	Issue	Urgency			Average Rating of Importance
		Combined	1st Conf.	2nd Conf.	
(11)	In-service training for staff	1	2	1	4.5
(24)	Comprehensive plan for implementing career education goals	2	1	3	4.3
(8)	Personal/social education	3	6	2	4.4
(3)	Development of appropriate career education materials	4	4	6.5	3.9
(16)	Infusion of career education with regular classrooms and dorm programs	5	3	8.5	4.2
(18)	Earlier start on career education with continued emphasis throughout schooling	6	8	5	4.3
(14)	More administrative commitment	7	5	9.5	4.0
(7)	Involvement of parents and families in the career education process	8	11.5	4	4.1
(9)	Dissemination of successful programs and models	9	10	9.5	3.7
(2)	Educating the public about employability of the deaf	10	8	13.5	4.3
(12)	Better use of community resources	10	8	13.5	4.1

* These data are based on a 5-point scale, with 5 being of critical importance and 1 being of no importance. The data were pooled and averaged for both conferences combined.

MSSD/NTID National Project on Career Education

The evolution of a good idea can be facilitated by a receptive audience and daring thinkers who will risk putting resources behind their ideas. With a systematic assessment of needs, proper timing, and the right combination of talent, the idea will flourish.

Combining the efforts of two institutions is not an easy task to initiate and coordinate, but MSSD and NTID risked such a joint effort when they decided to fund the development of the National Project on Career Education. On October 1, 1978, the Project coordinator was hired and the MSSD/NTID National Project on Career Education was officially born.

Objectives for the Project

The Project focuses specifically on career education for primary and secondary hearing impaired students. The long-range goal is to ensure that in each state there is a program which can assist other educational programs serving hearing impaired students in

a. Developing and implementing plans for a comprehensive kindergarten -12th career education program, and

b. Infusing career education concepts into all curricula.

By working toward these objectives through an in-service training program in career education and planning skills, all of the top ten urgent issues from the working conferences will be addressed. Basic in-service training for staff, the most urgent and most important issue of all, will be provided to facilitator schools regionally through training teams coordinated through the project. Trainers who will

deliver these regional workshops will be drawn from the faculty of the Model Secondary School for the Deaf (MSSD), the National Technical Institute for the Deaf (NTID), and the Kendall Demonstration Elementary School (KDES).

The content of the intensive training and the follow-up program of technical assistance will address the other highly urgent issues. The career education teams sent to the regional workshops by the facilitator schools will consist of four members, representing a chief school officer or program administrator, a counselor, and two teachers, one from the elementary level and one from the secondary level. Inclusion of an administrator addresses the issue of more administrative commitment, and inclusion of an elementary teacher emphasizes support of the issue, earlier start on career education.

The conceptual model of career education taught in the workshop emphasizes infusion of career education concepts into all curricula and a system to develop a comprehensive plan for implementing a career education program. Workshop objectives also cover use of community resources, involvement of parents, and educating the public about employability of the deaf. The conceptual model includes an element focusing on values and attitudes, which will address the highly important personal/social education needs of deaf students. Finally, the development and dissemination of career education materials and successful programs will be facilitated by the Project coordinator acting as linking agent with regional teams during the three years for which the Project is funded.

A program of regular follow-up and technical assistance will be provided on site for each facilitator school by the Project coordinator and selected members of the MSSD/NTID/KDES training team. The facilitator schools will implement a comprehensive career education program and, when ready, will assist local schools in developing and incorporating career education into their programs.

Discussion of Project Procedures

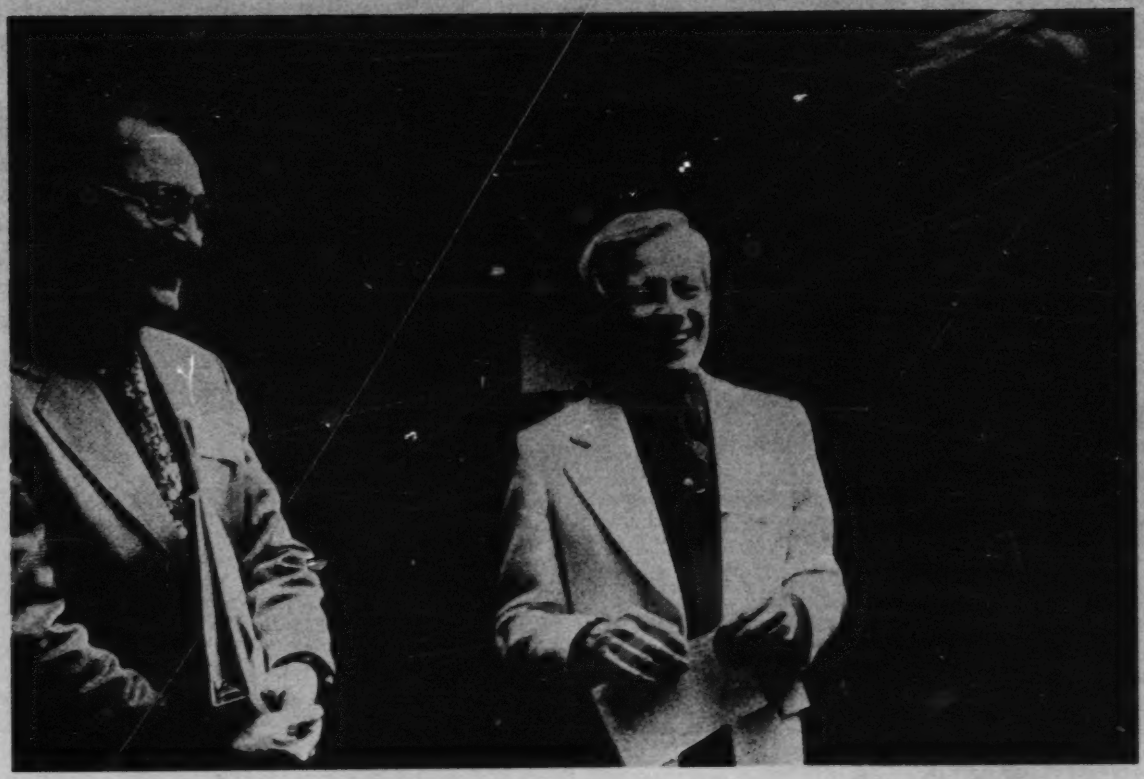
The coordinator of the National Project on Career Education is responsible for planning and reporting efforts under the management of the Project codirectors from MSSD and NTID. Monthly meetings are scheduled for the Project Planning Committee (PPC) members. Until February 1979, PPC membership included the following: one representative from the Pre-College Programs at Gallaudet College with experience in career education program administration at the Kendall Demonstration Elementary School (KDES), Jinny Johnson; Project codirector from MSSD, Victor Galloway; the coordinator of special projects from MSSD, Richard C. Steffan, Jr.; the Project codirector from NTID, Milo Bishop; and the Project coordinator, Judy Egelston-Dodd, for a total of six members. In February, David Updegraff replaced Victor Galloway, who moved to the superintendency of the Scranton State School for the Deaf, and Janice Richardson, Career Education Coordinator, KDES, joined the PPC.

A Superintendents" Advisory Committee (SAC), consisting of six school superintendents, has been selected to assure continued conformity of the objectives of the Project to the needs of the schools. The selection represents a variety of programs (city/rural/suburban and residential/ mainstream) and diversity of perspectives (black/women/hearing impaired), as well as geographic balance. The superintendents, who are scheduled to meet quarterly with the Project Planning Committee, are: Robert T. Dawson, Colorado School for the Deaf and Blind; Richard Dirst, Atlanta Area School for the Deaf; Larry Forestal, Millburn School for the Hearing Impaired; Henry Klopping, California School for the Deaf, Berkeley; Sr. Nora Letourneau, St. Mary's School for the Deaf, Buffalo; and Bettye R. Morton, Whitney Young "Magnet" High School, Chicago.

Summary

The MSSD/NTID National Project on Career Education (NPCE)will address the specific issues identified as highly important and urgent by participants from the national working conferences on career development for the hearing impaired.

The NPCE program consists of regionally based in-service training and technical assistance to participant schools. These schools will become training sites for local educators of the deaf who are in need of assistance in establishing comprehensive career education programs. The momentum gained by this national thrust will hopefully have lasting influence on the quality of career education for hearing impaired students.



APPENDICES

A. Papers presented at the Two Working Conferences on Career Development for the Hearing Impaired

B. List of Participants and School Affiliations

C. List of Pre-Conference Readings for Participants

APPENDIX A

1. A Response to the Top Issues: In-Service Training and Planning for Implementation - Kenneth B. Hoyt

2. A Life Experiences Approach to Career Education - Harold L. Munson

3. Where the Action Is: Implementing Career Education for the Disabled through In-Service Training - Carolyn D. Raymond

4. Another Approach to Career Education - Victor H. Galloway

5. The Challenge for the Future - Edward W. Corbett, Jr.

An Edited Transcript of
A RESPONSE TO THE TOP ISSUES:
IN-SERVICE TRAINING AND PLANNING FOR IMPLEMENTATION
by
Kenneth B. Hoyt
Director, Office of Career Education
Washington, D. C.

I was given these sheets of paper that talk about your 26 issues and was told that there are only two issues that you want me to say something about. One is called Comprehensive Plans for Implementing Career Education Goals, and the other is called In-Service Training for Staff.

Let me just sort of play around for a few minutes with your two topics. When I'm going to talk about plans for implementing career education goals, I think of strategies. I think of career education as a different kind of implementation effort than we have ever had in American education. This is the first time we have seen a major effort for change growing out of local expressions of needs. Instead of starting as an idea in the federal bureaucracy which needed to be sold to the local communities, this effort started in the local communities and went up to the federal government. This is the only movement which said, from the beginning, that we are going to use a people change approach, not a program add-on approach. This is the only effort which, from the very beginning, said career education - whatever it is--is not something schools can do by themselves. Career education has to be a broader community effort, because educators have neither the resources, the know-how, nor the skills to deliver career education by themselves. We are the only ones who ever started that way, saying that we are not trying to make a new discipline. In implementing the career education concept, we recognize the fact that career education has no power. It works because of the power given it by others. Career education should happen not because somebody ordered it, or directed it, or got a new job as a result of it, but just because the kids in our nation need it to happen.

These constraints make planning for career education unique in terms of the basic strategies that are going to make it work. At the local school level, the most basic concern is the strategies you use to make clear to people in the community what career education and its mission are. The problem that we have at the community level is to avoid presenting them with a program and then asking for their help. If career education is going to be a community effort, the community must become involved in its definition. We can't take a set-in-concrete definition of career education. We simply take out a set of person needs, and we see if these are of interest, appeal, and concern to

people in the community. Out of these needs they make for themselves a local definition of career education. This is, I think, the most essential thing in planning. I have heard people say that if you want to put a man on the moon, the first requirement is to know what you are trying to do. I think that is the problem we have. We need to start with a modern, up-to-date definition of career education in which the community becomes involved in the definition. If you are going to plan, I think you need a plan starting right there. The strategies I would plan for career education could be applied to any other reform effort of a similar nature. I see people now trying to apply it to population education, law and order education, citizenship education, and so forth. It doesn't matter if it is career ed or one of the others.

The second strategy is to make sure that if you are going to talk about career ed, that here, right here in River City, these views are recognized by the community. I think we have gotten past the point of trying to define career ed in terms of career development concepts. I think we are at the point of defining career ed more in terms of goals. If we can come down and define it more in terms of goals, we can let the community decide: do these kids need the basic academic skills, do you think they need basic good work habits, do they need a personal and meaningful set of work values, do they need a basic understanding of the economic system, do they need career decision-making skills, do they need job-seeking/job-getting/job-holding skills, do they need skills in making work a productive part of use of leisure time, unpaid work, do they need skills in reducing stereotyping, do they need skills in humanizing the work place for themselves?

We have now broadly defined career ed in terms like these. We make clear that vocational ed is no longer considered a part of career ed. Both vocational ed and career ed are related to education as preparation for work, but they are two different strategies. That is the way we've got it. Now we can take it out to the broader community and see if these concerns are reflected there. Are the needs there? I emphasize this only in terms of planning. I emphasize it primarily for one reason, namely, that it is going to set the base for evaluation. I'm talking strategy now. This group is sophisticated enough to know the different ways you could get career education started. Our concern has got to be how you sustain the effort, not how you get it started. Anybody can get it started. We are not in a short run ballgame. We are in an effort that is going to lead to long run, continuing, sustaining efforts on this part of the goal of education as preparation for work and making the concept of work a more meaningful part of the total life style of all persons. Youth and adults, lifelong. If we are to do that, we have to get it defined in terms of these needs. That is strategy #2.

Strategy #3. Just as comprehension precedes communication, so too does cooperation precede collaboration. There are too many people right now, I think, trying to move too fast toward making career education a collaborative effort. You don't do that easily, and you don't do that overnight. I say you are going to have to get cooperation first. Now that means that you have to start at the top. We funded fairly good size projects last year with the National School Board Association, and they now have four films called The School Board Debates Career Education. We did a project with the Counsel of Chief State School Officers and a project with the American Association of School Administrators. I'm going out next week on a project we have with the Education Commission of the States, the governors' offices and their education commissions. I know these people aren't going to deliver career ed, but they are the ones who can keep it from happening. I've got to have the support from the top.

Everybody talks about how you have to have a school board policy. We have missed the boat on what we are talking about on school board policies in career education, I think, because we have school board policies coming out our ears that say we are in favor of career education. That doesn't mean anything. School board policy that is going to mean something will put accountability for career education in the classroom. A school board policy that says career ed is a very good thing, won't everybody please get involved in it, is doomed to failure. We have to get away from any notion about career ed being something added to any teacher's load. The school board policy has to reflect the notion that career ed has always been part of the teacher's responsibilities, and we are now simply saying as a school board, "Teacher, accept this part of your responsibility!" Put accountability in the classroom into the school board policy. As Step 4, I would say, "Let us do our in-house education before we get in the out-house function."

To digress for a moment, career ed had been going on in community after community long before the education system ever caught on. We have had and have today marvelous programs of career education, in Junior Achievement, 4H clubs, Explorer Scouts, the Girl Scouts, Business and Professional Women's Clubs of America, National Urban Coalition, and Rotary International. Career ed is being delivered through lots of community organizations other than the school system. We have to plan, it seems to me, as though the school system becomes one more community organization involved in the delivery of career education. Not that the school system takes it over, but that the school system becomes one more of the elements involved in the delivery of career education. This is why I say let us do an in-house effort with the faculty, the elementary, junior high, senior high, by discipline, counselors, curriculum people, and building principals - anyone who is interested in doing something. If we get the right school board policy passed, we come to that faculty with a system that has in it rewards for those who do it. If not punishment for those who don't, at least rewards for those who do, and you have to plan some way for those rewards. Now I think, as far as I can tell, we have to plan to be patient. One of the problems that career ed

has had over the last 7-8 years is that we have had a lot of people, like myself, who were crusaders. "There may be something else in the world as important as career ed, but I don't know what the hell it could be." You know, this has got to be the most vital thing in the whole world, and a whole bunch of us think that way. However, most of the people were trained to get involved, and they don't think that way. I don't care what kind of reward or incentive system you have, what kind of non-reward system, you are not going to sell it easily to a teaching faculty, and you aren't going to sell it at all to some of the teaching faculty. Plan that you will find some stars, some resistors, and some reluctants. First of all, identify and reward the stars. I take those who are willing to change, and I'll encourage them and reward them anyway I can, building by building within the district. I will ignore the resistors; I won't sell them anyway! If I do sell them, it is going to be way late down the road and I don't have time to do that. I will use the stars to convince the reluctant, and I won't plan on 100%. If five years from now the Career Ed Incentive Act has run its course, and we have 85 percent of the faculty at a given school involved in career ed, I would say that is excellent!

I have a little project (about $400,000) this year that I think is kind of neat. We are going to try to find who is the best third-grade teacher in the United States doing career ed, who is the best fourth-grade teacher, who is the best junior high social studies teacher, who is the best senior high chemistry teacher. It's a 50 person cadre, just K-12, taking each kind of faculty. We are going to get nominations from all over, and outstanding people doing it. Now, it doesn't really matter if we pick the best one or not; what matters is that we pick somebody who is pretty good, and then we've got a list of a lot of other people who are pretty good. We are going to encourage them to share and steal from each other and then disseminate to others like them across the country. They listen to each other better than they listen to us.

I have another series of projects going this year with, for example, the American Council of Teachers of Foreign Language, the National Council of Teachers of English, the National Science Teachers Association, the National Council of Teachers of Mathematics, and so forth. By discipline, with the emphasis on the discipline, and how career ed can be infused into that discipline. Plan to implement by discipline. You have to have the head of the English Department at the high school be responsible for what other English teachers are going to do in infusing career ed in the classroom. I'm going to find a building principal who really wants to do this, one who will reward the teachers when they do it. I want a principal who is willing to come down to the classroom, who is willing to open up this classroom to the broader community, giving teachers time to do this. That is my next stage. After I have X number of teachers in each building doing it, I want to see in which of those buildings I have an administrator who is willing to take it to the next step. I will find that administrator, and then see what those star teachers can do to get the other teachers to come along in that building. And I won't try to make it a whole school district-wide effort to start but concentrate on one elementary school and maybe one junior high,

maybe two elementaries and one junior high, and maybe one senior high. Then I would put as many resources as possible in that building. That's what I would do. I want whatever I have to be a quality effort. I would rather have it be quality and small than big and poor in quality. I have to have something that I can demonstrate works. I have to find one or more of the elements that can be demonstrated to get greater community support for career ed.

Of all the things career ed could demonstrate, I would rather in general take the criterion of whether we improve the basic skills: reading, writing, and arithmetic. I say that not just for proposition 13 or the back-to-basics people. I say that as something that would have pretty broad community appeal. If I can demonstrate career ed as a vehicle for improving the basic skills, I can get into more esoteric things like self-concept later. Some of these things may appeal to us more but are hard to explain to the community. I want something I can explain to the community and have them say, "That's a good thing."

Now, I know we can demonstrate that criterion if we do the in-servicing right. This is the second topic you have given me. I can't talk about these as two different topics; I just talk about them together. Now to do the in-servicing right, you are going to have to be very unselfish about the career ed strategy. We have to show kids why it is important to learn what we have to teach today. One of the ways of doing that is showing them that people use this in their work. The worst thing that could happen, the really death knell on career ed, would be all teachers doing nothing but career ed. People use the discipline in their work; education is preparation for a work type of goal. This is in with all of the other basic reasons why it would be important for kids to learn; encourage teachers to use all of those reasons wherever one is more appropriate than another. Career ed is only one of those reasons. So we start the in-service effort by saying "Let's try to figure out, faculty, how we are going to put a sense of meaning and purpose in the teaching/learning process."

To put a sense of meaningfulness and purposefulness into the teaching/learning situation, to make it real and important to the kids, you have to make it real to yourself. You have to identify what is important that you are teaching and they are learning. By and large, you know very well achievement will go up if you put a kid who wants to learn in a room with a teacher who wants to teach. That's the way to improve achievement. And career ed is just a vehicle for making that happen. But, a whole lot of people are doing the staff in-service training wrong because they are stopping at that first stage. We don't get the significant differences if we stop at that first stage. We have to have a system of

in-service that turns around the teaching methodology so that we have a positive approach to learning in the classroom. Not a negative approach. Not a very short reward system for the kid. A way of positive emphasis on rewarding the work of the student in the classroom. Now that is just as important a dimension of in-service for career ed as is showing the career implications of the subject matter. We have to show teachers how to give positive rewards for any work the student does. Then we have to show teachers how to introduce variety into the teaching/learning process with career ed as the vehicle. Now that is where we can start getting involved with the broader community. Bring in a resource person or take him on a field trip. Combine a little bit of experiential learning with the typical cognitive learning. What I want to emphasize to the teacher is the importance of putting variety into the teaching/ learning process and not just career ed variety. I am saying we are going to do better on the specifics of career ed if career ed is a vehicle for improving American education. And, finally, teaching teachers how to emphasize and reward the practice of good work habits in the classroom. Now if we can show teachers those four things, how to put a sense of meaningfulness and purposefulness in the work task, how to reward work when it occurs, how to put variety into the work situation, and how to emphasize good work habits, we have covered the four basic avenues which over the last 100 years have demonstrated themselves to be eminently successful in increasing industrial productivity. If they will do that, then they also increase educational productivity. Now I'm not saying that this is all we need to do in career ed; I'm talking about getting a bench mark for a sustaining effort.

We need to show teachers how to do all this in a non-career ed way. It will be better for career ed to use some of our money that way. If you want to make career ed a goal in some of these communities, I would take all of these groups you have out there, like the 4-H and the Boy Scouts and the Girl Scouts and the JA and, instead of ignoring them, instead of resisting them, instead of fighting them, instead of competing with them, I would go out and say, "Hey 4-H, Hey JA, Hey Explorer Scouts. Let us see what we can do to help your efforts." I would play them up all I could in the community and give them all of the credit possible. If I can do that, then a) I'm going to have better delivery of career ed, because they will help deliver it, and b) I'm going to have more community spread for career ed because they have community contacts. If I help them, they will help me, and I will get from them some knowledge of how I can work with the community. It's not a one-way street, but it's a two-way street. Anything you do in the name of career ed, you will have a lot of actors involved: teachers, counselors, and administrators, parents, businessmen, labor union leaders, these community youth organizations, Chamber of Commerce, Rotary club, the American Legion. Yesterday I was with the Business Professional Women's Club.

They adopted the neatest career ed resolution at their last national convention you could ever imagine. They want to have these business clubs, just as an example, in high schools. Let's really make big club effort in the high schools this year. Big payoff in the long run, if we do that.

These are my thoughts on implementing career ed. I'm thinking that you go very slowly, making sure that whatever you have works. You make sure that you can report back to the community on something the community is interested in. You make sure that you know what you are trying to talk about when you say career ed. I say comprehension precedes communication, communication precedes cooperation, cooperation precedes collaboration. It's collaboration toward which we are headed. So that, in the long run, career ed is not an education effort, it is a community effort. In the long run, career ed is not an effort limited to the K-12 school system, but a womb to tomb conception, a tinkle to wrinkle kind of effort that we are talking about. The next mini-conference I am doing is with the American Association of Retired Persons and I can't wait. They are a very powerful, neat group, and we are going to get them all involved in career ed. We can talk about that, if you want to, in questions. Thank you very much for listening.

Questions

Q: I'm Leon Fuhrman from Oregon and I'm interested in your definition of career ed, that voc education is no longer part of career ed but rather two different strategies.

Hoyt: Yep, I know you don't do it in Oregon but I had to do it.

Q: Yes, but in explaining that to the community and to the people in Oregon, could you tell me a little bit about how that evolved?

Hoyt: Yes, we're having continual problems with people not understanding the difference between career ed and voc ed. In part, this is because the career ed effort in OE, began with voc ed money and voc ed support, and it began on the wrong foot. It began with the voc eds thinking the career ed mission was to make the "academiacs" just like them, that they have been doing it all the time, and now they want the academic teachers to do what they have already been doing. They missed the point that they had to change, too. Now that you have asked the question, let me give you the whole thing. We had a lot of resistance from academic teachers who never liked voc ed teachers in the first place. "Well, you want me to be like them. You've got rocks in your head; I don't want to be like them." So I had to make something different that would appeal to the academic teachers. Then, too, I had to do this initially before Congress from 1970 until 1974. Congress would say, "What is career ed?" and, "Well, if I'm going to give you money for it, can you define it?" Then I had to define it for them to get any money. After I defined it, they said, "What is the difference between career ed and voc ed? We already support voc ed." So I had to give them a

definition that would make career ed not voc ed. Also, if we are going to talk about putting career ed into higher education, we won't succeed if they confuse it with vocational education. . . Conceptually as a discipline area--cognitive, substantive content discipline area--vocational education has sold itself to the Congress and to the American public on the basis of providing its students with specific marketable entry level vocational skills. It was sold that way to the Congress again this session. Now career ed, as you know, is saying that we don't knock the increasing necessity for these specific vocational skills. Voc ed needs expansion: occupational education, community college needs expansion, professional specialization at the four-year college university level needs expansion. It is harder and harder to get into this occupational society if you don't have a set of marketable skills that some employer is willing to pay for. We recognize the need for expanding voc ed. But as voc ed becomes more and more necessary, it becomes less and less sufficient. While it becomes more and more necessary for kids to acquire the skills to get in, they are also faced with a repetitive occupational change. Getting in, period, is a gyp to kids. You have to teach kids how to move along after they get in, how to move up, how to change with change. These are the career ed skills. If we do not highlight the career ed skills, they will get lost in the shuffle of the specific voc ed skills. Let's look conceptually at the delivery of career education in the classroom. Voc ed teachers have always delivered career education in the classroom. If you say that voc ed is not career ed, that is a far cry from saying vocational educators are not involved in career education. Vocational educators <u>are</u> involved in career education. The point we are trying to make is that so are English educators, so are foreign language teachers, so are science teachers, so are third-grade teachers. The fact that a teacher is involved in career ed doesn't make that discipline a part of career ed. The discipline is the discipline! There is no more sense in saying voc ed is part of career ed than saying science education is part of career education. Science education is science education. Voc ed is voc ed. English ed is English ed. Foreign language is foreign language. Career ed is a concept to be infused among all the disciplines without making yet another discipline to be added to all of the rest of them. This is said in no way to degrade, demean, downplay, take away from the importance of voc ed in any sense; it is an academic discipline in line with all the other academic disciplines, all involved in the delivery of career education. I know in Oregon at the State Department level and local level you have career ed and voc ed mixed together. I think conceptually you have to make this kind of separation. I have been trying to set up community career education action councils. When you go out to the broader community, you really get involved with that community, and the first thing you want to tell them is the difference between career ed and voc ed. You have a lot of people in the community saying, "We don't care. We are interested in education as preparation for work." We say that both of these are parts of that; they say, "Well, we are really interested in education . . . so we are interested in both voc ed and career ed." And I think, as we move down the road on our community action councils, they will increasingly become community work education councils, not career ed councils, not

voc ed councils. This national meeting that we have coming up Monday and Tuesday in Washington, for the 50 states' Advisory Councils on Career Ed, is a good example. It's an evolutionary thing we are trying to do. All we are trying to do is keep this in proper conceptual perspective, so that we make it a sustaining effort. We talk about giving kids the skill to change with change, making work a more meaningful part of the person's total life style. Work is a human need, psychologically speaking. That extends way beyond anything that has to do with jobs, or occupations, or all the clusters. I get sick and tired of all the occupational clusters, as though all we are concerned about is the world of paid employment. The world of work and the world of paid employment are quite different worlds. There is a fuller part of the world of paid employment that is not a part of the world of work as in a humanistic sense, and there is a fair part of the world of work that is not in the world of paid employment. In career ed we have to be concerned that way.

Q: In what way is career ed relevant for the hearing impaired?

Hoyt: Career ed is essential for the hearing, and it's essential for the hearing impaired. I can't help thinking that, if you could view it as a four stage thing, there is one stage missing for the hearing impaired kid. A hearing kid goes through career education, goes through education, then he goes into his life after school. He is accepted by the labor community. For the hearing impaired, for any handicapping condition, when you finally get a kid who hopefully is developed into a whole and who wants to work, you put him in with a community that really doesn't want to have him. Is there any way of linking this career ed effort in with the affirmative action movement? I can't help but suspect that it is just tokenism on the part of big business, the corporate end. The one thing we do mean in career ed is reduction of stereotyping. If anybody thinks we are not serious about it, they have missed the whole point of career ed. What I have been interested in all my life has been expanding freedom of choice for every person. I probably shouldn't be talking like this, because we don't even have our rules and regs up, but I'm going to tell you what we are going to do on the new career bill (Career Education Incentive Act). I'm making up strategies now for administering that bill. The bill says that every project that is funded with the federal career ed bucks either has to be a) free of bias and stereotyping, or b) aimed at reducing the influence of bias and stereotyping on account of race, sex, handicap and age. There are four areas of stereotyping that by law we have to be concerned with. Even if we didn't want to do it, it's in the law. Now, I have all sorts of groups coming to me saying, "How many points on your criterion are you going to give to the proposals which show they either are free of bias and stereotyping or aimed at reducing them?" We are not going to put it in the point scores at all. I am going to make it a precondition for the proposal being eligible to be read. We are going to have an all-or-none judgment. Either the activities called for are free of bias and stereotyping or they are aimed at reducing them. They have to demonstrate that, or it won't even get read by a panel. That's what I am going to

do with it. This is why I'm not talking with a group like this about career ed for the hearing impaired; I don't want to talk about it differently than we talk about it for everybody else. I refuse to think it is right to take the one way in which these kids are alike and ignore the fact that in terms of individual differences they are just as different as any other group of kids; in terms of brightness, aptitudes, interests, values, anything else, they are just as different as any other group of kids. Why should I take the one way in which they are alike and try to build a different career ed approach on that basis? That isn't right. I don't think that is fair to these kids. We are going to have to begin this effort in kindergarten or even pre-school; school is too late to begin what we are trying to do. We are going to have all of the skills that we want to give every kid in the United States. To me, none of these career ed skills are more important than the skills that we are going to give them, not to adjust to bias and stereotyping but to overcome it. You talk about the biases of the employers, this is one of the kicks I'm on. We have said all along in career ed that these kids don't know enough about the American system of private enterprise. They don't understand the American economic system. We have to get them outside the walls of school, get them to understand that system. A lot of kids don't. The more I fool with career ed, the more I am convinced that the American system of private enterprise has as much to learn about these kids as these kids have to learn about it. It isn't a one-way learning street that is involved here. We are talking about a system; that is long run. We are talking about a system right now which should include the three parts: the education system, the kids, the private enterprise system. In community after community, at any given time on any given day, you can find any two of these three ganging up to criticize the third. For example, you hear the teachers and the kids talking about the multinational cartels and how they are ripping us off on the oil wells, and the double digit inflation, and so forth.

Q: What happens when the career ed money runs out?

Hoyt: I am saying that by the end of the third year, I want to get as many as we can through that JDRP and into NDN. I don't care if the career ed money goes away. I have all the money in the world in the Title I of ESEA and in the handicap money (BEH) and all this other money. I don't need career ed money! Use their money and let them get the credit. It will keep it going that way. That's where all the power is. We don't need the power as long as we can use theirs. That's neat. When you quit worrying about how much credit you get and only worry about how much help the kid gets, and you are willing to go with how much help the kids get, you are going to get all sorts of credit. If you keep worrying about how much credit we are going to get, then the kids are going to continue not getting much help at all. That is why I am fooling around right now with the Labor Department, trying to do this YEDFA stuff in the youth employment bill in with career ed. They have all the money; let them get all the credit. I don't care if they get all the credit. If we can combine our little efforts with their efforts there will be a lot more kids getting a lot more help. This is what we are doing it for.

A LIFE EXPERIENCES APPROACH TO CAREER EDUCATION

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If you have ever served on or worked with a committee whose purpose was to implement the concept of career education, then you know of the frustration that goes into hammering out a viable and integrated program. The collaborative involvement of school personnel, the business-industrial-labor complex, the government, and the home in the struggle to provide meaningful and worthwhile experiences for youth is no longer a sporadic, incidental, or localized concern. It has become a concentrated, nationwide, head-on attack of major proportions. Hardly a week goes by that I don't see or visit with a number of people who, in some way, are involved in the effort. I'm impressed with the continued enthusiasm of those that are working hard to forge ahead, to innovate, create, and change existing ways, ofttimes under difficult conditions or what appears to be insurmountable odds. In fact, we've assembled here for this conference because we recognize the magnitude of the task.

It was my good fortune to get involved in developing an approach to the career education of the handicapped in 1971 when Ralph Hoag, then Superintendent of the Rochester School for the Deaf, encouraged me to explore some of my ideas with the students and staff at that school. Our concern evolved into what has been called the CREED model for the career education of the deaf. The acronym CREED stands for Cooperative Research Endeavors in the Education of the Deaf, and our efforts were supported by all the schools for the deaf in New York State. When the basic model was developed, and as the materials to implement it were in the final stages of "debugging" and field testing, the Bureau for the Education of the Handicapped in the U.S. Office of Education supported the development of an in-service program so that teachers could be prepared to participate fully in the program. This support resulted in the development of a 10-session, 20-hour in-service training program for teachers. Copies of the In-Service Leader's Guide are available to you free of charge at the CREED display in the foyer or by contacting me here or at the University of Rochester.

With this background, let me proceed to tell you about the CREED career education model. There are a few underlying beliefs that distinguish the CREED model and identify its primary characteristics. First, and foremost, it is rooted in the concept and functions of work. Work, as it is defined in the CREED model, encompasses both employed and nonemployed time. In this sense, work is an activity that includes both one's occupational and leisure pursuits. Work, then, is the sum of one's need to achieve for the benefit of self and others. Therefore,

for the child, the adolescent, the young adult, or the older adult, work is a life span endeavor, a significant part of our everyday existence.

This brings us to our second underlying belief. If work is a significant part of our everyday existence, then the concept of career education must have a "here and now" character, as opposed to its more common and conventional emphasis on the future. Instead of, "What are you going to be when you grow up?," CREED focuses on the present using of what one knows and how one thinks and feels about living and working. Thus, it builds on the present experiences of the individual, it provides for the expansion of knowledge and concepts in lifelong learning, it fosters understanding of "self" as an essential element in human maturing.

Third, the CREED model is rooted in the notion of career evolution. Students engage in activities that are designed to develop and enhance their decision-making and problem-solving skills. Learning how to make decisions is learning how to compare, critique, summarize, interpret, classify, observe, and hypothesize. In learning how to process information and in using these thinking skills, individuals learn about the judgments that are involved in their choices and decisions. While a planned and rational approach to "picking an occupation" may be appropriate in some instances, the CREED model views career development as a series of decisions which eventuate, over the entire life span, in work involvement.

Fourth, career education is more than the mere presentation of job information -- as important as that element may be. Work tasks and work situations in every aspect of living are what life is all about. Through these, one achieves an identity, a feeling of being and a purpose for becoming. CREED provides for the structured introduction of concepts about work, work roles, and work functions. It offers learning exposures whereby the growing, maturing individual becomes acquainted with work and ways of working. These exposures are planned so that learners can use them as a source of meaningful experiential learning. For example, most day-to-day classroom tasks involve work activities and work demands which are as real as those encountered in many work situations. The work functions inherent in the demands of school, home, or community life, the pressure of completing these tasks, and the conditions in which these tasks must be accomplished are the source of this meaningful experiential learning. Believing that we can ill-afford to waste these valuable life experiences or to leave them to chance, CREED is geared to capitalize on them.

And that leads directly to our fifth underlying belief. Helping students to identify, think about, and assess their life experiences is a curriculum concern of the school. It is an integral part of the teaching-learning process. This locates the career education right where it should be: in the classroom. In promoting this point, the career education movement has utilized the term "infusion." Prior to

that we talked of "integrating" career information in subject matter classes. We can use whatever terms are necessary to get the job done, but quite frankly, the responsibility is clearly a function of the teacher. While this may not be universally accepted for several years, we are progressing, albeit slowly, in that direction. If teachers need help in understanding and implementing that function, and they do, then we must recognize that need and service it. The CREED in-service training program has been developed to service such needs.

And finally, the sixth and the last of the underlying beliefs. Even though the CREED program has developed materials to implement each of its five components, a great deal can be accomplished with few additional expenditures. While it is helpful to have access to selected materials that can supplement the total school effort, it is not essential, nor is it necessary to accumulate the hardware and software that have so recently become abundantly available. The creative school staff can move in many directions within any school budget of reasonable means. It seems far more important to have the school staff theoretically attuned to the task. If they are imbued with a sense of the significance of career education, committed to action, and provided with basic support, they will generate ideas, materials, and techniques.

If you are motivated by these beliefs, then you may be intrigued further. Let's go back to the first of the underlying beliefs, the belief in work as a significant part of our everyday existence. The United States Department of Labor has coded all the jobs in the American economy. There are nine occupational categories. Each category is divided into divisions and groups. Such an occupational arrangement is a useful and practical way of acquainting young people with the structure of jobs in the American labor force. And, in the CREED program, we believe they should become familiar with these different occupational categories. The Department of Labor has developed this basic classification scheme even further. They have analyzed every occupation, referencing the extent to which it requires a person to work in relation to <u>data</u>, <u>people</u>, or <u>things</u>. Helping young people discover and explore these work orientations is another meaningful way of acquainting them with work and the opportunities it affords. Since young people are utilizing these orientations in responding to the varying demands in their own living and working, they can relate readily to them. In coding each job in the <u>Dictionary of Occupational Titles</u>, the United States Department of Labor has identified twenty-three work functions. Seven of these functions are identified with working with data, eight with people, and another eight with things. For those of you who may not be familiar with these 23 work functions, they are as follows:

Data	People	Things
Synthesizing	Advising	Setting-Up
Coordinating	Negotiating	Precision Working
Analyzing	Instructing	Operating-Controlling
Compiling	Supervising	Driving-Operating
Computing	Amusing	Manipulating
Copying	Persuading	Tending
Comparing	Speaking-Signaling	Feeding-Offbearing
	Serving	Handling

In view of the thousands of jobs in the labor force and the changing nature of these jobs and work tasks associated with them, it seems inappropriate to approach career education solely from the point of view of informing young people about jobs. They could never hope to learn all they would need to know about every job anyway. Furthermore, the changing nature of work routines and work activities would soon make much of their learning obsolete. CREED, therefore, emphasizes learning about the different work functions and the characteristics of these functions. In this way, young people can learn to assess themselves in relation to the three work orientations -- data, people, things -- and to the twenty-three work functions they represent. They can learn to identify these work functions when they are being performed, and they can identify the nature of the work tasks associated with each function. Although jobs and the way jobs are performed may change, the basic work functions should remain standard for years to come.

With this longer period of usefulness, then, learning about the ways of working has much potential in self and job assessment and greater application in job seeking. Both now and in the future, students can transfer and apply this information. In this way, CREED caters to the lifelong process of evolving a career by providing a base for a lifetime of learning about the world of work and the ways of working. This base should be useful as individuals engage in career decision-making over the life span.

This realm of information comprises the structured conceptual and informational exposures of a curriculum concern. These are cognitive exposures about work which should be assured each learner. In the classroom, however, these cognitive exposures of a conceptual and informational nature are combined with the self and experiential learnings of the individual. It is as these four ingredients are assimilated by the learner that career maturation occurs.

With this approach to learning about work hopefully fixed in your minds, let's turn to the "here and now" character of the career education concept. Young people are involved everyday in working with data, people, and things. The three work orientations, then, have an immediate reality. By relating these work functions to their everyday

life at home, at school, and in the community, the way people work becomes an immediate and personal consideration. Work, in this sense, can have concrete meaning for each student. Let's look at the reality of this idea. Consider the comparing work function. In comparing work, people must make judgments of a functional, structural, or compositional nature, which usually requires looking for differences or similarities in color, size, shape, or character. Children learn to distinguish among objects and to differentiate among items using a variety of criteria (color, size, shape). As they get older, their judgments are honed to finer discrimination. Eventually, they may consider jobs where comparing is the primary work function, such as proofreaders who looks for errors, egg candlers who check for size or color, or lab technicians who check for compositional shadings or color changes. I could go on at length enumerating similar applications of all 23 work functions at all levels of the life cycle.

Rather, let me illustrate another underlying belief of the CREED approach. There's the belief that focuses on the use of the curriculum, making career education an integral part of the teaching-learning process. School work involves many data-oriented activities. Students do the computing work function in mathematics. Math teachers have many opportunities to orient students to the computing function, to expand students' awareness of computer application in their daily lives, to help students assess their computing abilities and interests, and to suggest jobs where computing is a primary activity. Precision working, a things work function, is an integral part of science, as students make fine adjustments on microscopes and dissect grasshoppers or frogs. It is an integral part of shop or homemaking courses, as students use their body or work aids to move, guide, or place objects or materials in situations where considerable judgment and very exact movements or measurements are necessary. Experiences such as these help students to assess how they feel about and perform in such situations. Making maximum use of these experiences in science or shop class, or in any classroom for that matter, helps students to explore and assess their hand and finger dexterity and their eye-hand or eye-hand-foot coordination. The dynamic and significant nature of these learnings cannot be denied. But even more importantly, the very fact that we can provide for the very young --for people of all ages -- makes this a challenging and exciting venture for any school staff.

In the practical sense, the CREED program consists of five basic component strategies. One component activity, career gaming, uses the Career Insights and Self Awareness Games (CISAG) in an adapted version for the hearing impaired. The six games in the CISAG program provide a deliberately scheduled opportunity for students to discover, explore, and assess their interests, life goals, abilities, and work-function behaviors in a classroom setting. Each game employs a different technique, offering opportunities for deaf learners to become familiar with new concepts and to be exposed to new information. Through the gaming process, they become more aware of their own feelings and preferences

and form an expanded or clearer basis for their further exploration and assessment in future experiences.

Another component, making field trips, helps students to learn about different work tasks and activities by observing workers on the job--preferably, but not necessarily, hearing impaired workers. Learning about Work, a student field trip manual, contains pre-trip activities which alert the students to the types of observations in which they can engage on the trip and follow-up activities which can help to reinforce their learning. It contains illustrations depicting the different work functions as well as a dictionary of work function terms. Questions which may be raised while on the field trip are included in a special "tear-out" page which students may use as they interview workers. A Teacher's Manual suggests ways for organizing the field trip, including preparation and follow-up activities. A special list of words has been included to help teachers in associating work tasks with the different work functions.

A series of slide sets is used to portray each of the 23 work functions as these have been identified by the United States Department of Labor and described in the Dictionary of Occupational Titles. Each slide set depicts a variety of work tasks associated with the work function being explored. The slides emphasize these work tasks as they are encountered in home, school, and community experiences, as well as in different occupations. By relating the work function tasks to the home, school, and community experiences of students, the "here and now" element is maintained.

The Career Briefs in the Education of the Deaf Series consists of forty pamphlets which survey a variety of jobs representing the nine major occupational categories. These career briefs were developed to provide accurate, current information about existing career opportunities for the hearing impaired. Most occupational information has been prepared for hearing students but these briefs were specifically designed to meet the informational needs of secondary deaf students. They are written in concise, familiar language, infusing career-gaming terms and work-function concepts from the other components. In addition to a description of the occupation, each brief contains a profile treating the communication requirements of the work in the expressive (speaking/writing) and receptive (listening-observing/reading) areas. This information helps deaf students to compare the various communication demands associated with the different types of work. It also provides a means whereby they can assess their own communication qualifications.

The last component, Clarifying Work Values, helps the student to examine the significance of work in their lives. Using home, school, and community work situations, it provides opportunities for students to think about their own work attitudes and work values and how they express them in work behaviors. The booklet, Clarifying Work Values: Strategies for Career Education, serves as a guide for teachers in

conducting classroom activities which involve students in identifying and examining attitudes and values that are associated with work habits, working conditions, worker motivations and dissatisfactions, and the economics of work.

All of these materials are on display in the foyer. I hope you will take a few moments to examine them.

Having looked at all dimensions of the CREED program, let me summarize briefly. The transition from theory to practice is really not complex. The underlying beliefs as I have described them have a psychological and philosophical base that can be supported. That's the theoretical abutment. The truss forming the bridge to the practical abutment is the structure and nature of work as it has been characterized in the classification schema developed by the United States Department of Labor. The practical abutment consists of the materials and techniques used in the teaching-learning process.

While the five components of the CREED program represent a variety of career education practices, the possibilities for the development of other materials are by no means exhausted. It can be readily expanded or modified to accommodate the existing needs of a school. Although it has an academic bond that is rooted in student exposures to the occupational structure and the work functions, it is sufficiently flexible that many other career education materials or strategies can be incorporated. Its several adaptable features, in my opinion, make it an especially attractive approach.

Perhaps most important of all, is the fact that the CREED program materials, and the in-service package, represent the concerted effort of many deaf educators. I think its real potential rests largely in the fact that classroom teachers of the deaf were significantly involved in the development of the materials. Teachers at the New York State School for the Deaf in Rome (New York), at St. Mary's School for the Deaf in Buffalo, and at the Rochester School for the Deaf worked with these materials and provided feedback for their revision and refinement.

WHERE THE ACTION IS!

IMPLEMENTING CAREER EDUCATION FOR THE DISABLED THROUGH IN-SERVICE TRAINING*

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Are we really interested in the career development of the disabled? For several individuals across the nation the answer has been "yes" for a number of years. However, for the vast majority of educators the answer has been one of passive resistance. It is a well-known fact that the disabled have, traditionally, been short-changed by our society. While special educational programs for these individuals have begun to be increased and improved in general curriculum areas within our schools, little, if any special effort to address their career development needs has been exerted.

In recent months, the disabled nationwide have begun to be more outspoken with respect to society's oversight. Those who are able to speak out indicate that they no longer are content to be kept out of the mainstream of life. Some of the more fortunate disabled individuals are now beginning to be helped to find meaningful positions for themselves in life. Some, though certainly not enough, are finding employment that can provide their means of sustenance and happiness. Unfortunately, they are doing this largely through their good fortune in finding someone around them who can help them realize that meaningful lives and careers are possible for them. Perhaps this help is coming from a friend, a parent, or a counselor. But almost always the element of luck is involved. Such assistance has not been forthcoming routinely and has not reached the majority of the disabled in our nation (Moffit, 1978).

The career development needs of disabled youth have to date been subsumed, largely, within the general career education efforts and have not, consequently, received any special attention. There has been no concentrated effort on the part of those of us in the field of career education, those of us who are supposed to be concerning ourselves with the career development opportunities of <u>all</u> our youth, to meet their special needs. Consequently, they have had to rely on luck with respect to career planning and development. And regrettably, luck is not working for the vast majority (Moffit, 1978).

*Monograph prepared for the Second National Working Conference on Career Development for the Hearing Impaired, September 1978.

Ken Hoyt, in his monograph on "Career Education and the Handicapped Person," indicated that C. Samuel Barone, USOE Bureau of Education for the Handicapped, presented the following predictions regarding the approximately 2.5 million handicapped youths who will leave our school systems in the next four years:

525,000 (21%) -	will be either fully employed or enrolled in college
1,000,000 (40%) -	will be underemployed and at the poverty level
200,000 (8%) -	will be in their home community and idle much of the time.
650,000 (26%) -	will be unemployed and on welfare
75,000 (3%) -	will be totally dependent and institutionalized

As Dr. Hoyt states, these predictions raise very grave concerns for those dedicated to the career education movement. The prediction that one million of these disabled youth will be underemployed is a very serious matter. "The concept of underemployment is one that pictures a person as possessing greater degrees of productive capability than the tasks he or she is asked to perform routinely require. Underemployment leads to boredom on the job and is seen by many as a major contributor to worker alienation in our society at the present time." To predict that this will be the fate of 2 out of every 5 disabled youth leaving our school system in the next four years can only be regarded as a serious indictment of our educational system and of the larger society.

A successful career education program for disabled individuals belongs to more than just the disabled themselves. All segments of society need to be, in a sense, "desensitized" with respect to physical and mental disabilities. We must reach the point that we can look a disabled individual directly in the eye, recognize and admit her or his disability and then accept that individual for what he or she can rather than cannot do (Hoyt).

This points to the crucial need to provide training activities to bring about change in a positive direction for all educators as they relate to and involve themselves in the career development of our disabled youth. Not only do we need training programs for all types of educators but parents and community leaders as well.

The purpose of this document is not to present a need for such a program or to specify the ingredients of such training activities, since this has been done, and the readers are already committed to the desire for developing and delivering training activities for those involved in the career development of our disabled youth. Rather, this paper will focus on three major areas of concern which the writer has with respect to career education training activities and some tips for conducting such. The three focuses are:

1. Specific concerns regarding career education that must be considered as the training outcomes are being considered,

2. Suggestions regarding the design of training activities in general, and

3. Several tips on the delivery of effective training activities.

Training Concerns with Respects to Career Education

There are several concerns that have come to this writer's attention with respect to delivering career education training activities that, if not attended to, can decrease the efficiency with respect to how well we achieve our desired training outcomes. The first concern deals with the fact that frequently we fail to define career education early in the training activity/program. We often tend to feel that the participants already have a complete understanding of just what career education means. In fact, the participants coming to the training activities do indeed have a perception that they already do know what career education means. But, if you ask them to define it for you, frequently they will indicate that it is helping youngsters to get jobs or providing occupational information for youngsters. Or some other individuals tend to equate career education to all of life. They believe that our work is inseparable from and of no greater importance than relationships with peers, neighbors, and family, use of leisure time, personal growth, or a chosen standard of living. In other words, our life is our career and career education becomes education itself. In fact, we have come over the last few years to recognize that, because no definition was established early in the career education movement, career education has become all things to all people. If a trainer fails to establish what his/her definition of career education is or fails to reach some consensus as to what career education is, it is questionable whether or not training can indeed take place, or perhaps one should say any change in behavior or learning can take place on the part of the participants. If one has not defined what career education is, how does that same individual decide what the training outcomes should be?

Career education is an evolving concept that really started out with no definition; now it has evolved into hundreds of definitions across the nation. So it means one thing one place and another thing some place else. It really has become quite confusing, confusing to those of us who are charged with the responsibility for getting it into the schools, but, most important, confusing to the educators who are responsible for its delivery. If they don't know what it is, how can they deliver it in the classroom? Or if it means different things to different educators in the same system, there is no consistency. Regardless of the agency or institution that is the recipient of the training, some sort of consensus must be reached with respect to the definition of career education, or confusion will reign during the training segment.

The mental image which many hold of career education, according to Dr. Hansen (1977), varies from a very narrow concept of preparation for paid employment to a very broad conception of preparation for life. One of the major problems with many of the definitions is that "career" and "occupation" are used interchangeably or that "career" is not defined at all. Dr. Hansen, in an extensive study and from this writer's perspective one of the most important documents currently in the field, indicates that definitions vary in their rationale, goals, and focus in the following dichotomous ways:

an emphasis on the paid work or occupational career versus a focus on life career

an emphasis on occupation and occupational information versus a focus on the person or individual

an emphasis on fitting into labor market and manpower needs versus individual choice and decision making

an emphasis on adjusting people to a status quo society versus helping them develop their potentials to improve and change society

an emphasis on occupational choice and job placement versus a focus on process and life span choice making

an emphasis only on the economic role versus integration of work role with other life roles

The focus or focuses that the trainer takes influence how career education is delivered in the system.

Another problem which Dr. Hansen points out is the various ways that people define key terms, such as "work," "labor," "play," "leisure," "employment," "task," "position," "role," "job," "occupation," "vocation," "avocation," "career," and "organization." The definition that most career education trainers and practitioners now use, for instance, with respect to work is one defined by Dr. Ken Hoyt: "Work is a conscious effort aimed at producing benefits for oneself and/or oneself and others. It can be paid or nonpaid; it can take place as a part of one's vocation, hobbies, leisure, and etc."

Dr. Hansen, in her study across the nation with respect to a career education definition, has, however, found some areas of agreement. These areas include:

an effort to diminish the separateness of academic and vocational education

an area of concern which has some operational implications for every educational level or grade from kindergarten through graduate school

a process of insuring that every person exiting from the formal educational structure has job employability skills of some type

a direct response to the importance of facilitating individual choice making so that occupational preparation and the acquisition of basic academic skills can be coordinated with developing individual preference

a way of increasing the relevance or meaningfulness of education for greater numbers of students than is currently true

a design to make education an open system in that school leavers, school dropouts, and adults can reaffiliate with it when their personal circumstances or job requirements make this feasible

a structure whose desired outcomes necessitate cooperation among all elements of education as well as among the school, industry, and community

an enterprise requiring new technologies and materials of education (i.e., individualized programming, simulations)

a form of education for all students

One of the major concerns with respect to definition that trainers have to deal with very early in the training situation is that many people still equate career education with vocational education. It is crucial that the distinction between these two areas be made. Basically, the difference is this: vocational education has as its major focus that of getting out youth entry level skills so they can enter the world of paid employment. It also gives them information necessary for entering that world. It helps students get into the market place. Career education, on the other hand, focuses on the relevancy of current school learnings to work. Also, the exploration and awareness of all the many careers in the world of work is important. Many youngsters are exposed to only a few careers before they choose an occupation. Another important focus of career education is on decision-making skills, so that youngsters, when they do make choices, have the skills to make decisions with as much information as possible and the skills to process that information. Career education also focuses on the value of work both from the fact that society needs workers and that an individual can derive personal meaning from work; they can like work. The discipline of work, being responsible for getting a task done on your own, is emphasized as well as basic work habits. The student's job now is to be a student and to be a good student, to accomplish work on time, to be responsible for good work, to follow the directions of their supervisor the teacher, and much more. Career education also has as one of its major focuses that of developing interpersonal skills. Both vocational education and career education are important and work hand in hand. But

vocational education is no more important to career education than basic skills. Both areas represent bodies of knowledge that provide the youngster with entry level skills (Hoyt, 1977).

Career education focuses on preparing students for a lifelong process of making purposeful choices and adjustments, choices and adjustments as they relate to their education and work, work whether it is paid or unpaid.

Therefore, some tips in designing training activites is to first define career education for your institution. This writer also suggests that you not focus only on occupational information and placement and that you not focus on career education being everything. Start on the idea of career education being a vehicle for increasing the relevancy of the current curriculum. If possible, get career education defined beyond general statements to specific goals and finally into specific student outcomes so that when training is conducted, it is directed to specific student learnings which are desired by the institution as it has defined them.

Another very important concern, second only to the need to define career education before conducting training, is to be sure that the participants of training activities understand the concept of infusion. It is the belief of practitioners that the training should emphasize that teachers should as often as possible weave career development concepts into their daily instructional activities, that teachers are responsible for the delivery of the concept, and that no training should take place unless the infusion concept is illustrated throughout the training activities.

The dictionary indicates that to infuse implies a pouring in of something that gives new life or significance. We use it to indicate that a particular career development concept is woven right into the regular curriculum topic to give it new life. Career education practitioners feel that infusion is very important if we want to maintain career education over a long time after those of us involved in training educators have moved into other endeavors. Infusion also insures that career education will not cost much after teachers have been trained. It also refutes the argument that career education takes more time, since if it is done right, it should enhance student motivation to learn what is already being taught in the curriculum and in a shorter period of time. The infusion approach indicates that pupils can acquire the skills, knowledges, and attitudes career education seeks to convey while simultaneously being motivated to learn. For example, pupils can increase their reading effectiveness by reading about the careers in which they have expressed interest while learning more about those careers. They are going to be reading something; why not about careers and something they are interested in? Pupils can learn both about the free enterprise system and increase their skills in basic mathematics if the mathematic problems are real-life, free enterprise concerns. Pupils can learn decision-making skills if an activity, regardless of the content,

uses a teaching approach which has the students making decisions like which books to read, what art activity to involve themselves in (Hoyt, 1977). Let's examine the concept of lifestyle. Say one of your fifth grade career development goals is to help students explore the range of lifestyles and to help them discover whether their career choices are in harmony with the lifestyles they might consider in the future. This could be infused or woven into the existing curriculum without much increased time. For instance, in the fifth grade social studies where frequently social change from an agrarian to an industrialized society study is studied, right in the instructional sequence could be the discussion, "Ways particular societal change affected jobs and change in lifestyles." Many of the readers of this document studied Chaucer and about the travelers on their way to Canterbury. It would be very easy while studying these characters to also look at their jobs and lifestyles, to note similarities and dissimilarities. Chaucer could come alive.

It is important that the "how" of infusion (integration) be part of the training activity, since it is one of the most important concerns of teachers who are responsible for delivering career development concepts in the curriculum. And remember to focus on how these concepts bring increased relevancy to the already existing curriculum program.

A third concern in this first major area is a caution with respect to going a curriculum development route as a part of the training approach. Unless the curriculum development endeavor is a means to an end, to assist the teacher in understanding the career development concept being taught and how it is infused, it probably should not be undertaken. There are many curriculum development guides lying on shelves gathering dust. Training should focus on bringing about attitudinal change. Career education is a concept, a procedure, rather than a curriculum. Moreover, teachers are not instructional product developers, were not trained to be, and seldom write anything of real value. This is not a criticism; it is just that this is not what teachers were trained to do. If you look at materials that have been developed, you will find a lack of variety, bias in types of occupations represented, bias in how to look at careers, socio-economic biases, and much redundancy. Moreover, you will find that most of their products are things that teachers are already doing in the classroom. So, be cautious and think very carefully as to whether or not you really want to get into a curriculum development endeavor in and of itself.

I also believe that it is very important that teachers recognize that they do not need a lot of media and materials to deliver career education. If it is interwoven right into what is already done as a means of bringing relevancy to what is being taught, you do not need a great deal more media. Many people will disagree with the writer on this point. But her opinion is a very strong one, and one that has evolved over the last seven years of being a career education practitioner. Most of the media materials on the market are not good, and this even becomes another problem. But, the main concern is that of the matter of

cost and the idea that we are now going to do our career education activity as opposed to infusing it into each aspect of instruction. So, one tip is to train participants that the concepts can be taught without new, expensive media.

Designing Effective Staff Training Activities

Quite obviously, it would be impossible to cover all of the concerns and/or tips in designing effective training activities. But the writer has identified some specific areas which appear to be vital when thinking about and planning for training in the area of career development. Before the specific areas are covered, there are a few points to be made. The first is, as a trainer, not to get trapped into something called a training activity when indeed it is not such an activity. Training has several characteristics. First, the focus is concern on the problems of skill; "how to" is uppermost. Training is concerned with "whole person" learning. It is not concerned with just primarily academic or verbal-intellectual knowledge but is actually concerned with three major areas:

1. Cognitive learnings or the knowledge base,

2. Competency, or the ability to actually deliver or exhibit the behavior desired, and

3. Commitment, or the desire to use the knowledge and the competency in the setting which has been identified.

If a participant does not move through all three of these areas (they frequently happen simultaneously), it is questionable whether training has been effective. Therefore, the trainer must keep all three of these areas uppermost in mind when designing training activities.

Training also implies the opportunity for practice of the particular skills with immediate feedback. Activities are designed which allow the participant to repeat performances of the skills desired and find out how well he or she is doing with respect to that specific skill. And finally, effective training provides a situation for the trainee which is somewhat distant from the real situation. Training allows for safe experimentation, which provides the trainee a chance to mold the behavior desired.

So it is important that the term "training" only be given to those things which indeed are trying to change the knowledge, attitudes, skills, behaviors of the participant. Training focuses on successfully approximating from one point to another. This is quite different from curriculum development activities or problem-solving activities, and it is important that we not confuse the various times when people get together to do certain tasks.

Crucial to effective training is a systematic approach to workshops. Someone has said, "If you fail to plan, you plan to fail." It is imperative in a systematic approach to the design of training activities that needs of the participants be assessed, that specific objectives be spelled out in advance which are measurable, that resources be carefully selected to relate directly to the objectives and the specific needs of participants. And finally, that logistics are handled very carefully so that when the actual workshop is conducted, the trainer can focus on the activities rather than on logistical problems.

The writer in this paper would like to deal with three major concerns:

1. The components of competency-based transportable training modules,

2. The difference between adult learners and child learners, and

3. Considerations to be taken in selecting resources

As has been mentioned, an objective or competency-based training approach will help insure that the most effective training activities are indeed being designed. The writer of this document has been saturated by the works of Jim Poppin in this area, and as a result, the following should be contributed to Dr. Poppin even though it is being written from the head of the writer. Objective-based training activities has four major ingredients:

1. Specification of objectives

2. Preassessment

3. Instructional activities

4. Evaluation

As has previously been mentioned, the first and most important task is that of specifying measurable objectives based on that which the trainer wishes to achieve. Second, some type of preassessment, whether it be self-assessment or assessment that the trainer has control of, should take place. This allows the trainer to determine whether or not the objectives as stated are the most appropriate, whether or not learners already possess the objectives. It also allows the trainer to test on pre-entry level skills, and most importantly, when coupled with the fourth component, that of evaluation, allows the trainer to determine whether the activities conducted have been effective in bringing about the desired change in the learner behavior. The fourth component quite obviously is important in determining how effective we are: evaluation. It is amazing how frequently we, as trainers, are not credible judges of how effective we have been in the training situation. We are sold on that which we are teaching and we tend to note the "nodders" or those

people who have indicated an interest throughout the presentation. We frequently do not realize that we may be missing the boat with many of the participants. No training activity should go unevaluated.

But this writer would like to spend a few paragraphs in this document on the third component, that of instruction. There are several learning principles that when used in the design and delivery of training activities increase the effectiveness of the training. The following is a brief discussion of these learning principles.

Very early in the training activities, the trainer should reveal the objectives of the particular training segment. The "what" and perhaps "how" should be described. This allows the participants to focus their energies on those objectives which the trainer feels are important. As Popham has often described, how many of you have often tried for an entire semester to outpsyche a professor as to what his or her objectives are, only to come down to the final test and find that you had not figured out the right objectives? You had spent your energies studying and preparing for the wrong things, and in your one opportunity to reveal the knowledge that you had learned, were not prepared? Revealing your objectives helps the learners know where you are going; it also helps the trainer stay on target. Now there are a few times when the trainer would not reveal the objectives, usually in affective areas. But in most cases, revealing the objectives will increase the effectiveness of the training activities.

Another principle of learning which trainers frequently fail to incorporate into the design of their training activities is what many have called motivation, and Popham calls perceived purpose. Why are the participants learning the objectives as described? Sometimes trainers are lucky and the participants are ready and eager to learn when they enter the training session. However, because of past in-service activities or preset notions regarding why they are there or even an event that may have occurred just prior to entering the training activity that may have been somewhat disturbing, we frequently find that participants are not highly motivated when they enter the training sessions. Very early in the training segment, after revealing the objectives, some perceived purpose should be promoted.

The third ingredient, or learning principle, has already been described as well as the fourth: appropriate practice and feedback. These two principles of learning are probably the most potent of the principles. It is unfortunate how frequently we, as trainers, provide the intellectual knowledge but not the practice on the knowledge in a safe environment which will allow the participant to go back into his/her own situation and demonstrate the behavior desired. Practice, practice, practice -- an important ingredient of all training activities.

A few other perhaps less researched ideas with respect to the design of training activities need to be mentioned. Most trainers have found that to actively involve the participant in the training segment

is very important. This writer in most training segments feels that seven to ten minutes is as long as a trainer should talk before allowing for some type of active participant involvement. Also, this involvement should have as much variety as the setting and the objectives will allow. This is the second of these latter points and that is to provide a variety of tasks. And finally, the trainer must look to insure that appropriate sequencing has taken place.

The second major area of this part of the document deals with adult learners and how they may be different from children. The concerns in this area have been addressed in part but hopefully when the participants enter the training situation, some motivation change exists. The most helpful form is dissatisfaction with one's own present performance. However, sometimes that motivation is not that pure, and it is important for the trainer at the design stage to be aware of the level of motivation and where this motivation is coming from. Also, with respect to readiness, is the need to differentiate training needs. Training requires focus, a concern with the specific "how-to's" rather than general theoretical knowledge. Training also needs to be differentiated in that it meets the various needs of the participants in attendance.

Hopefully, the training activity will be seen as a release from tension. Unfortunately, many training activities actually leave the participant with increased tension rather than less. Participants need to see the training activity as one that is beneficial and practical. Finally, it is important that the training activity not seriously jeopardize the participant with respect to his or her membership with colleagues. Examine very carefully the activity to insure that no embarassing types of situations are included. John S. Randall (1978) has identified several differences between alert adult learners as opposed to children. He identifies these differences as follows:

> Adults must want to learn, whereas children will learn something just because someone said they should. Some children will learn to avoid a failing grade even though the subject is of little interest to them. This is not true of adults, however, who will not learn something just because someone says they should. They must have a desire to learn.
>
> Adults will learn only when they feel a need to learn, can see the immediate benefits of what they learn. Adults must feel that they have gained something useful from the training situation; they become impatient with too much theory or background. They like simple and direct kinds of activities.
>
> Like children, adults learn by doing. Immediate practice on what they have learned will increase their retention and probable use of that learning. Randall indicates that if adults are not actively involved in the learning, they will forget 50% of it within a year and 80% within two years. Some studies indicate that within 24 hours, participants will have

forgotten 50% of what they heard the previous day and in two weeks will have forgotten 25% more for a total of 75%. Obviously, adults can learn by listening and watching, but they'll learn more if they are actively involved.

Adults learn by solving realistic rather than unrealistic problems. Therefore, practical situations should always be presented.

Past experience affects adult learning. Adults relate this past experience to what they are currently being presented. If the two do not fit, they probably reject or dismiss what is being presented. Adults obviously have had more experience than children. This can be an asset or a liability to the trainer: an asset if training relates to new learning, a liability if it doesn't. Also, it can be an asset if the trainer takes advantage and uses the expertise of the adult in the audience in helping build on what is being presented.

Adults like an informal environment. They have many structured situations which have been unpleasant, and the more informal the meeting, the greater the possibility for increased learning. How the chairs are arranged, what the rules and regulations are with respect to the setting all affect the learning environment.

As mentioned previously, adults respond to a variety of teaching methods. This is also true of children, but even more so for adults. Information should be presented using more than one sensory channel. This, of course, will depend upon the method used and the objectives to be taught.

Adults do not want grades, they want guidance. They want to know how they are doing, what progress they are making. Children will respond to grades, not adults. (pp. 10-12)

Larry Nolan Davis and Earl McCallon (1975) give us a few additional points on adults and effective workshops:

Adults are individuals who have relatively large bodies subject to the stress of gravitational stimuli. When young, adults could sleep on the floor; when older it's not so comfortable. Chairs should not be too hard nor too short nor too narrow. However, some adults fall asleep in chairs that are just right. Be sure also to include a lot of breaks.

Adults have set habits and strong tastes. Many adults are used to coffee in the morning and in the afternoon; some don't like coffee. Some want health drinks, some people like to smoke, some don't. Effective workshops are sensitive to these habits and tastes and accommodate as many as possible.

> Adults are people who have some amount of pride. Sometimes they are dependent, sometimes independent. Effective workshops attempt to develop abilities in self-direction and responsibility. Adults frequently come to the setting with many preoccupations outside of the particular learning situation. Adults have many demands on their time and very real life commitments. Some adults are impatient, some are overwhelmed, some are organized. Effective workshops are sensitive to these areas and attempt to achieve a balance between the right presentation and the time needed for learning integration. Adults respond to reinforcements. Most respond to positive reinforcement most of the time. Effective workshops build in appropriate reinforcement.
>
> Adults have strong feelings about learning situations. Some have had bad experiences and some good. Most can develop good feelings about the present situation if it is filled with success experiences. Adults are people who are afraid of falling behind and being replaced. Good workshops allow them to keep pace and grow with confidence. (pp. 19-26)

In designing training activities, these considerations with respect to adult learners must always be keep foremost in the mind of the designer.

The third area to be discussed in this section of the paper is that of selecting resources. A few major hints can be given at this point in time which were also presented in the Larry Davis book. In selecting resources, you should be primarily concerned with the following three things:

1. Are the resources the best available for achieving the learning objectives?

2. Are the resources consistent with the style of your training?

3. Are the resources consistent with the participants' style and what they expect with respect to the first question? A common mistake frequently made in planning workshops occurs at this point. Workshops are often built around the latest, hottest topic or expert and participants can take a back seat. With respect to the trainers' style, if the style is authoritarian, the resources will usually dominate the learning, leaving little room for participant expertise or opinion. If the trainer's style is laissez-faire, participants usually will be seen as the primary resource and if they bring nothing to the learning situation, it is possible that they will leave with nothing, especially if they are involved in the selecting of resources or other resources other than themselves. If the trainer's style is democratic, the learning resources selected should be those that provide a foundation for participants to build upon. Whatever the trainer's predominant style is, the selected resources should be consistent with it. (pp. 19-26)

Participants' style expectations can, if not met, ruin a training program. Pre-orientation to workshop activities is a must, and it is in this material that the "how" of the workshop should be described so that participants will not come expecting one thing and then receive another.

Delivering Training Activities

There are several tips in the area of delivery. But this document will mainly discuss the setting up for delivery and setting the learning climate. Larry Davis has identified several hints in this area with respect to setting up right before delivery takes place. It is a crucial component. Some hints in setting up just before delivery include the following:

With respect to materials, remove the contents carefully. Spread them out on a large table in the order in which they are going to be used. Check for their completeness and count the copies. Give participants only the ones you want them to have; this will avoid needless paper shuffling. If workshop packets are provided, participants can insert materials as they are used.

It's important for the staff to have a workshop briefing; each person should have a copy of the design with his or her areas of responsibility highlighted. Walk through the training activity by activity, asking each person to describe his or her role. Include in these roles individuals responsible for greeting, registration, etc. If the workshop is one of several days, only go over one day at a time at this juncture. Have someone available for making adjustments as participants are arriving.

Consultants should be considered members of the staff and should be involved in briefings as much as possible. If they are not present at the briefings, they should be briefed separately.

If participants are arriving at a facility they do not know -- a hotel -- arrangements are involved. Assist them in the registration and hotel check-in. This is important to setting the climate, which will be discussed next. Prior to the meeting, provide participants with a schedule, agendas, area maps, special events, etc.

Provide staff or the people responsible for the facilities with how the tables and chairs are to be arranged and all the required equipment. Examine the room carefully upon arrival to insure it is arranged the way you desired.

> Unpack all aids carefully. Try out all of the mechanical aids and check for spare parts. You are now ready or as ready as you ever will be so take a deep breath, take a drink of water, and begin.

Next to designing the training activities, probably the most important thing that the trainer can do is attend to setting a positive learning climate. The first few minutes of the workshop are very crucial. If a positive attitude is not presented or developed at this point in time, it will be very diffuclt to restructure for a positive climate later in the training segment. Here are some tips:

> In greeting participants, be sure that someone is around to give them a handshake, to provide a large nametag, and introduce people to one another as they come in. If refreshments can be served as people come in, this also helps them find a warm, inviting environment. If in the workshop you plan to have assigned seats or various assigned arrangements, do not do this initially since most adults prefer to find their own seats at the beginning and frequently like to set next to someone they know. This allows them to be comfortable. Describe the objectives, announce the ground rules, talk about the agenda, and where the restrooms are located, with invitations to move their chairs around. Later on, after some first activities, you can move them around into other seating arrangements.

Mr. Art Fettig (1978) provides some ideas with respect to the first two minutes. Within the first two minutes, some sort of warming-up activity should be provided for the participants. Five things are suggested to be attempted in the first two minutes, as many of them as the situation allows or the trainer feels appropriate. The five steps are as follows:

1. Respond to the introduction with humor.
2. Do a bit of humor that ties directly in with the audience or the occasion.
3. Get your audience to join you in applauding something.
4. Ask the audience a question.
5. Physically invade their territory. (pp. 16-17)

There are many other ideas with respect to delivery, but hopefully, in this document, you have been able to identify some that would be meaningful to you as a trainer.

In summary, this document has tried to, from this writer's perspective, give some tips on several concerns in providing training on the career development of our youth. It is the hope of this writer that it has also been meaningful to you, the reader.

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ANOTHER APPROACH TO CAREER EDUCATION

by

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Although the objectives of this conference are clear and need no further elaboration, the three basic ones are repeated here:

1. To define career education for hearing impaired individuals,
2. To create awareness of career education trends for hearing impaired individuals, and
3. To describe future priorities for the education of hearing impaired individuals.

Before discussion on another approach to career education in terms of these objectives can begin, we need to develop a number of assumptions underlying the development of an educational program for deaf individuals. They are:

1. The expectations of society for deaf individuals are similar to those for their hearing peers.
2. The social and economic needs of deaf individuals are similar to those of their hearing peers.
3. The range of individual differences among the deaf persons is similar to that among their hearing peers.

It would be tempting to suggest that, on the basis of these assumptions, approaches to career education for deaf individuals should be similar to those for their hearing peers. While many, if not most, of the concepts developed by leading authorities in this field are certainly applicable to the education of deaf individuals, the effects of deafness are such that some departures from the typical approaches in career education must be considered. As long as assistance from the various rehabilitation agencies are required by a large number of deaf school learners, it should be questioned whether the educational programs for deaf persons, be they residential or day programs, are meeting the needs of these individuals. Such assistance comes in the form of financial support to cover the costs of post-secondary education and/or training. There are, however, those individuals who require assistance in the form of personal adjustment training or work adjustment training, although they may have completed 10 to 14 years of schooling in a program designed for deaf individuals.

Career education has been defined in many different ways by different authors, but they all point to the same goals. To better understand the need for some departures from the typical approaches, the definition chosen for the purpose of this discussion is the one to which Dr. Kenneth Hoyt has made major contributions:

> Career Education is the total effort of public education and the community to help all individuals become familiar with the values of a work-oriented society, to integrate these values into their lives in such a way that work becomes possible, meaningful, and satisfying to each individual.

The key term here is personal value systems. The role of the educational system in assisting the individual to develop his or her personal value system has been widely debated and many caveats offered. It is generally accepted that, although the schools do play a vital role in helping their students to make appropriate decisions and to derive their values therefrom, the parents reserve their prerogative to provide their children with guidance toward a certain personal value system. It is probably appropriate for the vast majority of children who are in possession of all their faculties. It has been demonstrated repeatedly, however, that the parents of deaf children seek guidance from the educational and rehabilitation agencies when it comes to establishing life goals for such children.

Far too many deaf students enter the world of work ill-prepared to make appropriate decisions that affect their own lives and to implement whatever they may have learned during their 10 to 14 years in school. It is a sad commentary upon the times to note that a large number of deaf students have become quite dependent on the largess provided by the various government agencies such as SSI (Supplemental Security Income for the Aged, Blind, and Disabled), although they may come from well-provided families, drive their own automobiles, and attend colleges or other post-secondary programs. It has been argued that because a deaf student must spend more hours in study than his hearing peer he cannot spare the time to work. The argument continues that the time spent in co-curricular activities is just as valuable as time spent in work, if not more so. It is not the purpose of this discussion to argue against such premises but rather to offer another approach to career education that will address all such concerns and to consider some of the possible strategies in implementing such programs.

What is it about deafness that suggests the need for departures from the typical approaches? A timeworn cliche is that blindness separates the individual from things and deafness separates the individual and people. Cliche or not, it is an apt observation. Being from the field of education of deaf persons, this audience is well aware of all the ramifications of deafness; nevertheless, it should be emphasized that in this age of rapidly changing technology and the changing nature of the labor market, deafness presents new challenges that have only

begun to be addressed, challenges that require considerations of possible changes in the educational programs for deaf individuals.

In the literature that has been distributed to you, and which I hope you have had the opportunity to skim through prior to this conference, you may have noted the frequent references to "infusion of career education into the school curriculum." You may also have been exposed to the many definitions of a wide range of terms used in the educational circles, particularly in the areas of career and vocational education. Although the latter of two terms has been clearly differentiated, my private discussions with individuals from educational programs for deaf persons in various parts of the country reveal that there is still some tendency to use the terms "career education" and "vocational education" interchangeably. Thus the first objective of this conference is to define "career education" or, to state the objective differently, to understand the concept of career education and then to define the term on the basis of the needs of deaf individuals.

Let us return to the definition of career education given earlier. The problem as perceived here is the development of a personal value system and we all know that one's personal value system is developed over his or her lifetime and that the first ten or fifteen years are probably the most crucial years. Interaction with and among the members of one's immediate family and with peers at school contributes heavily to the formation of a solid and viable personal value system, which in turn influences the manner in which decisions are made and life goals established. The hearing child is exposed constantly to the "values of work-oriented society" and thus becomes aware of the problems and rewards inherent in a wide variety of occupations. Even if the hearing child should be a member of a nonsupportive family, nonsupportive in the sense that he or she does not gain the support or attention normally given to children of closely knit families, he or she is constantly bombarded with valuable information from the various television programs and other media. This child also learns a great deal about the careers of his peers.

It is true that in spite of the advantages that a hearing child may seem to have, career education has been given an impetus on the national scale by the growing concern that the child is not as well informed and as prepared to make wise career decisions as his counterpart a generation ago. If today's hearing child has a problem, then consider the plight of the deaf child. As was mentioned earlier, deafness separates an individual from people. No one needs to tell you about the communication problems with which a deaf child is confronted as he grows up. You are well aware of the fact that television for the most part is useless for this child. As a consequence, the deaf child arrives at school with his personal value system still in an embryonic form. The school then has an awesome responsibility to help this child further develop his values and to expose him to the values of a work-oriented society.

Since the deaf child must continually play a catch-up game, his school must be willing to adapt its educational programs to meet his special needs. If co-curricular activities, work experiences, career exploration, and occupational education are to be considered equally important, then the school must be willing to incorporate all of these programs into the deaf child's regular, day-to-day educational program. The practice heretofore has been to consider such programs as after-class or co-curricular activities. The classroom must serve not only as an instructional area but also as an arena wherein the deaf child is exposed to the values of society, one that is work oriented. He must be helped to understand that his exposure to the world of work and all of his career-related programs are designed as a part of his total educational program. In short, the school must help the deaf child develop his personal value system so that in his later years he is able to consider various career options, make tentative plans, and finally to make a decision on his postsecondary plans. In addition, he must become equipped with the ability to make similar decisions independently in the future.

In recognition of the importance of an all-out effort to prepare the deaf child to perform his life roles, the Model Secondary School for the Deaf has adopted a set of requirements for graduation which, hopefully, will serve his needs.

The table below lists the requirements:

GRADUATION REQUIREMENTS

Subject	Curriculum Units*	
English	8	
Career Planning System	8	
Social Studies	4	
Science	4	
Mathematics	4	
Communications	4	
Physical Education	5	
Gym Courses		4
Health		1
Work Study	5	
Work/Study Courses		2
Two part-time work experiences		2
One full-time, nine-week work experience		1
Electives (completed in at least two different areas)	4	
TOTAL	46	

*A curriculum unit is based on successful completion of existing course objectives from MSSD Course Guide as individualized for each student.

In developing an individualized education program as required by Public Law 94-142, curriculum units are prescribed for each student in the career planning system (8 units), work/study courses (2 units), two part-time work experiences (2 units), and one full-time nine-week work experience (1 unit). Some of these requirements may be waived on the basis of the student's previous experiences. The student's IEP is reviewed annually to determine the appropriateness of his program and to make changes as indicated.

The adaptions of the educational program at MSSD include: (a) the incorporation of specific career education courses or units into the usual subject matter areas such as mathematics, language arts, science, social studies, and others; (b) the establishment or expansion of the guidance program that addresses the need for deaf individuals to develop self-awareness, good self-concept, and career awareness; (c) the incorporation into the regular, day-to-day educational program systematized career exploration and planning; and (d) the integration of work experience programs into the deaf student's total educational experience.

With respect to the first approach, in cooperation with the Center for Vocational Education at the Ohio State University, thirteen learning packages have been developed which employ an innovative approach of integrating subject matter content and career education concepts. Information and skills relating to the different content areas are emphasized and combined with career education activities. The deaf child thus begins to develop insights into the relationship of the subject matter areas with his possible career options.

With the second approach, the faculty members in the instructional area, the clinical and support services, and the residence programs are made equal partners in the guidance and assistance of the students in their career learning and planning activities. Two packages are being developed that may be used by the school and the resident advisors (or dormitory counselors) to help the students understand themselves. One set of materials, Self-Understanding, helps students to recognize the forces that impinge on their behavior and decisions. In turn, they apply this self-awareness to decision making and career planning. The other set is Social Interaction which enhances the student's ability to get along with others in school, at work, and in other social situations. They are provided with practical experiences in dealing with a wide variety of social encounters. These two packages should be available later this year.

The third approach utilizes a system of individualized materials through which the student begins to examine and expand his personal value system. The system is called Career Planning System (CPS) and is designed to help the student achieve four major career development outcomes:

1. To learn about personal interests
2. To examine occupations to determine how they may relate to personal interests
3. To identify school courses and extra-curricular activities in which personal interests may be nurtured and in which related skills may be developed
4. To relate high school preparation to potential occupational choices.

As with the previously mentioned two packages, CPS will be available later this year. An important feature of the system is the delineation of the roles of the teacher, the counselor, and other individuals who figure prominently in the student's career development.

The graduation requirements in the area of work experience represent our fourth approach. Such experiences are treated in the same manner as are the regular academic courses in that they are included in the student's class schedules.

These four approaches represent our efforts to prepare our deaf youth to enter the world of work fully prepared to make decisions concerning their own lives and to adapt to the constantly changing society that is America.

THE CHALLENGE FOR THE FUTURE

by

Edward E. Corbett, Jr.
Maryland School for the Deaf

Technology changes in business, industry, and education are occurring at a fantastic rate and have created a limitless range of services, new products, and learning, as well as an exciting new future. While it is true that these changes have caused present career patterns to become obsolete very quickly, career education is one way to help us prepare for the future.

What implications does this rate of change and training have for the deaf population? Stahler (1969) stated:

> ... changes in industry are occurring at a rapid rate which affect the deaf profoundly, unless through training they are prepared both to meet modern skill needs, and not those of the past, and to be adaptable to the rapid changes taking place in industry.

In the same study, three pertinent questions were raised:

1. To what extent are the deaf actually being trained for the new openings due to technological developments?
2. To what extent are the deaf being prepared for jobs that are just beginning to come into existence?
3. To what extent is information on job trends available to training institutions for the deaf?

The import of educators is clear. Students must learn to cope effectively with personal, social, and technological changes; and schools should attempt to teach students to adapt, to learn new skills more readily, flexibly, and independently as future situations might dictate. In other words, schools should instill the concept of "cope-ability" to its students so they can adapt to continual changes in the future with speed and economy (Toffler, 1970).

The Working Conference on Career Development for the Hearing Impaired had three explicit purposes: (1) to define career education for hearing impaired individuals, (2) to create an awareness of career education trends for hearing impaired individuals, and (3) to describe future priorities for the education of hearing impaired individuals. This conference has defined the status of career education for the hearing impaired in the United States; has suggested a national plan for career education for the hearing impaired through an analysis of student and program needs data; has made an analysis of existing definitions of

career education and proposed an appropriate one for the hearing impaired; and has made recommendation of goals, objectives, and priorities for career education for the hearing impaired.

Schools and programs for the hearing impaired can respond to this Working Conference's priority needs for career education by participating in regional or state-sponsored programs and workshops, by conducting curricular revisions, by developing instructional materials, and by working with the community in identifying and using community resources in career education.

The following recommendations should be of some help in systematic planning and implementing career education objectives as part of the total school program:

1. Include career skills, beginning at the elementary school level, in order to develop attitudes that are unbiased and non-stereotypical concerning jobs, work, and workers.
2. Provide a reasonable level of support to encourage the implementation of career education in all grade levels by using existing personnel, programs, and facilities; by providing funds for training teachers, administrative staff, counselors; by establishing materials development and curriculum revisions; and by planning and evaluation.
3. Conduct pre-service and in-service training in career education.
4. Provide education with exposure to the world of work in broad cluster areas.
5. Maintain updated career resource centers.

Marland (1971) indicated that "all education is career education, or should be ...." and that employment, like education, is subject to constant revision. Toffler (1970) foresaw a society in which the ability to learn quickly a variety of new work methods would be of far more importance than learning through training or long experience in a single job.

It is up to us, as educators of the deaf, to provide our students with an orderly awareness and exploration of a large choice of career possibilities, with extensive information about occupations so that they will make intelligent career choices.

Mincer (1974) summarizes this point:

> While it is true that lack of youthful interest in serious academic study continues to plague schools and one way to motivate students to learn is to provide them with information about careers and, later, to place them in on-the-job training sites. This takes into account the broadest purposes of examined life; transmitting the cultural and intellectual heritage; socialization; identification and encouragement of

> talent; preparation for work; and an orientation toward "future personal, household, and public responsibilities."

(Today in schools and programs for the deaf, the term "career education" is highly specialized, excessively vocational, relentlessly sequential, and devoid of any reference to the reality of the working world. This should be changed!) In order to effectively and efficiently help our students select work on the basis of whether it provides personal joy, hope, and a sense of worth, we need to ask ourselves the two questions asked by Nash and Agen (1973):

> Should we teach our students that in order to secure jobs they have to have the personal characteristics like flexibility, general intelligence, adaptability, and a knack for saying the correct things and being in the right places at the best times?

or should we

> ... help our students reach optimum psychosocial development through extensive periods of free time where they can develop their skills and interests at their own self-chosen pace through sequence of planned activities involving technical competence to growth in personal, physical, scientific, aesthetic, intellectual, and political awareness?

It has been said that:

> If you feed a man, he will hunger again.
> If you clothe him, his clothes will wear out.
> But if you give him access to good education, he will take care of himself.

With comprehensive career education programs serving hearing-impaired students in elementary and secondary schools, our students can become fully self-supporting and contributing members of society.

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Mincer, J. Youth education, and work. Teachers College Record, 1974, 3, 2, 309-316.

Nash, R. J., & Agne, R. M. Careers, education, and work in the corporate state. The University of Chicago School Review, 1973, 82, 1, 67-68.

Stahler, A. Underemployment. In Ray L. Jones (Ed.), The Deaf Man and the World. Proceedings of the National Forum II of the Council of Organizations Serving the Deaf, New Orleans, Louisiana, 1969.

Toffler, A. Future shock. New York: Random House, 1970.

APPENDIX B

Participant Rosters

for the

National Working Conferences on Career Development

for the Hearing Impaired

Participating Schools

First National Working Conference on Career Development for the Hearing Impaired

American School for the Deaf
- David McGill
- Christine Tabbert
- Neil Tabbert

California School for the Deaf (Berkeley)
- MariAnne DeLuca
- Ralph Neesam

California School for the Deaf (Riverside)
- Tom Bryden
- Anne Rosebloom
- Steve Shouse

Florida School for the Deaf/Blind
- Raymond Butler
- Walter Davis
- Joseph Finnegan

Kendall Demonstration Elementary School
- Angela Bednarczyk
- Lynne Gelzer
- Vince Irwin
- Jinny J. Johnson
- Janice Richardson
- Richard White

Margaret S. Sterck School for the Hearing Impaired
- Corinne Klein
- Suzanne Raymond
- F. Eugene Thomure

Kentucky School for the Deaf
- Jim Lyman
- Kent Mann
- Clyde Mohan

Marie H. Katzenbach School for the Deaf
- James P. Lenox
- Judith Podbielski
- Ted Staroyiannis
- Doug Tyler

Maryland School for the Deaf
- Edward Corbett, Jr.
- Edward Hartmann

New York School for the Deaf
- Taras Denis
- Steve Freyer
- David Spidal

North Dakota School for the Deaf
- Allen Hayek
- Dwight Rafferty

Rochester School for the Deaf
- Joan Dickson
- Patricia Heffernan
- Fred Koch
- Leonard Zwick

St. Mary's School for the Deaf
- Jacqueline O'Donnell
- Michael Soehner
- Sam Taneff
- Sr. Loretta Young

Texas School for the Deaf
- Claire Bugen
- Ann Loftin
- Rayda Porter

Participating Schools

Second National Working Conference on Career Development for the Hearing Impaired

Alaska State Program for the Deaf
- Jon Deisher

Atlanta Area School for the Deaf
- Richard Dirst
- Grady Doster
- Holly Lumpkin
- Mona McCubbin

Boston School for the Deaf
- Patricia Bryant
- Rev. Charles Murphy
- Jeanne Thompson
- Hollis W. Wyks

Bureau for Hearing Handicapped Children
- Marilyn Goldberg
- Stanley Mink
- Nicole Spiro

Ceres Regional Aurally Handicapped Program
- Eldon DeWitt
- Mark Hammond
- Pam Schultz

Charleston County Program for Hearing Impaired Students
- Darragh Miller
- Marlene Seaborn
- Jeff Simon

Clarke School
- JoAnne O'Connell
- George T. Pratt
- Robert Storm

Dallas Regional Day School for the Deaf
- Larry Flores
- Janis Kasparian
- Kim Koepke
- Arlene Stein

J.H.S. 47 School for the Deaf
- Peggy Lang-Barek

John Hersey High School
Henry Blim
John Hicks
Gail Turney
Louise Wilson

Lexington School for the Deaf
William Byrd
John Eboli
Judy Smith

Millburn School for the Hearing Impaired
Bonnie Borresen
Lawrence Forestal
Joan Price
Theresa Stevens

Oregon School for the Deaf
Leon Fuhrman

Phoenix Day School for the Deaf
David Brooks
J. Jay Farman
Alan Molmud
Gabrielle Sorensen

Portland Regional Program for the Deaf
Jerry Bennette
Sally Browder
LaMont DeJong
Frank Jackson

School Opportunities Los Angeles County
Delores W. Richie

Scranton State School for the Deaf
Dorothy Bambach
Neal Musmanno

SELACO-Downey High School
Mary Ann Mayer
Carolyn Rowland

Special School District of St. Louis County
Harry J. Bahr
Robert Huskey
Gregory Muenster
Jackie Simms

Whitney Young "Magnet" High School
Bettye Morton
William Pahle
Roger Stewart

Appendix C

Pre-Conference Readings

for the

Two Working Conferences

Hoyt, K. B. An introduction to career education: a policy paper of the U.S. Office of Education. Washington, D.C.: U.S. Government Printing Office, 1975.

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